

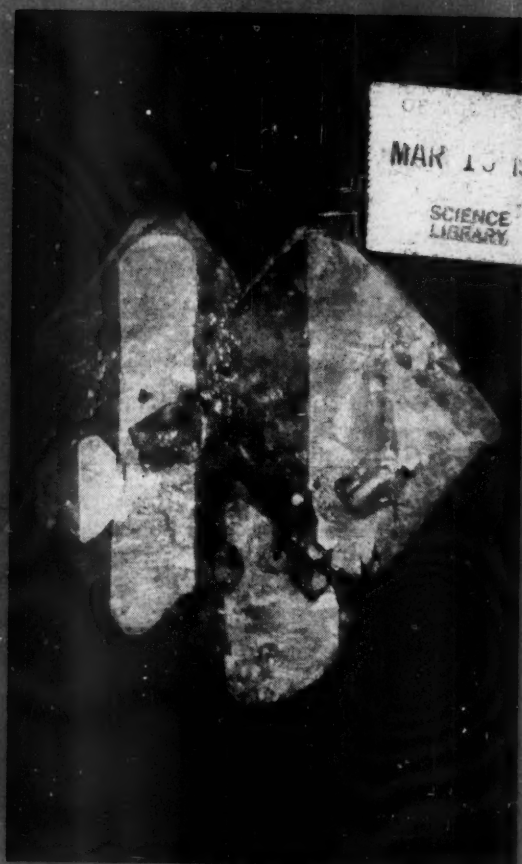
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ROCKS AND MINERALS

Mineralogy

Geology

Lapidary



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March-April, 1958

Whole Number 263

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ROCKS & MINERALS

PETER ZODAC, Editor and Publisher
America's Oldest and Most Versatile
Magazine for the Mineralogist, Geol-
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Published Bi-Monthly

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VOL. 33, Nos. 3-4

MARCH-APRIL, 1958

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CHIPS FROM THE QUARRY

Coming Events

Feb. 28-March 2, 1958—Fourth annual Gem and Mineral Show of the Tucson Gem and Mineral Society, Pima County Fairgrounds, Tucson, Ariz. For particulars contact Mrs. Irene Barber, Publicity Chairman, Rt. 9, Box 907, Tucson, Ariz.

March 7, 8, 9, 1958—The 1958 Convention of the Rocky Mt. Federation of Mineral Societies will be held in Phoenix, Ariz., in conjunction with the Annual Gem & Mineral Festival. The Mineralogical Society of Arizona, the Maricopa Lapidary Society, and the AiResearch Lapidary Society are the hosts.

April 26, 27, 1958—Fifth Annual Spring Show, Wichita Gem & Mineral Society, Kansas National Guard Armory, 3535 W. Douglas, Wichita, Kans.

May 1-4, 1958—National Gem & Mineral Show of the Texas Federation of Mineral Societies and the American Federation of Mineralogical Societies. Dallas Gem & Mineral Society, will be host. Women's Bldg., State Fair Grounds, Dallas, Texas. For particulars contact Dwight Halstead, General Show Chairman, 1728 Westchester Mall, Dallas 19, Texas.

June 19, 20 and 21—Northwest Federation of Mineralogical and Geological Societies 1958 Convention at Chow, Downers Grove Community High School, Downers Grove, Illinois. Earth Science Club of Northern Illinois, host. 4729 Prince Street, Downers Grove, Illinois.

Aug. 7, 8, 9, 1958—Eastern Federation of Mineralogical and Lapidary Societies Convention. City Auditorium, Asheville, N.C. For particulars contact Fred M. Allen, Jr., Box 501, Lincolnton, N.C.

Photo on the Cover

The photo on the front cover of this issue was sent in by Roger C. H. Doo, 35 Day St., Drummoyne, Sydney, N.S.W., Australia. It is of a superb anglesite crystal which he acquired some time ago; it came from the Proprietary Mine at Broken Hill, N.S.W., Australia. The crystal is $1\frac{3}{4} \times 2\frac{1}{2}$ inches in size and of a light wine-yellow color.

Potato-Shaped Boulder Wanted!

We are indebted to Phillip Morrill, Box 94A, RFD 2, Derry, N. H., for the following item, clipped from some publication.

POTATO-SHAPED BOULDERS may be worth more to you than potato-shaped potatoes. Perley I. Fitts, State House, Concord, N. H., chairman of the National Potato Shrine Committee, wants to find a boulder that looks like a potato to become part of a memorial to the birthplace of the potato industry in Derry, N. H. The boulder should be about two feet in diameter through the smaller part and three feet through the larger. If you come up with the best stone replica, your name will be inscribed on the memorial.

COMING

Special North Carolina Number

The July-August 1958 issue of R&M will be a Special North Carolina number as a tribute to the Eastern Federation of Mineralogical and Lapidary Societies Convention which will be held in Asheville, N.C., Aug. 7, 8, 9. From all reports the convention will be the largest ever held in the East and we want to give it an additional boost with a Special Issue of R&M.

Dealers who plan to have booths at the convention are urged to run ads in the Special N.C. Issue—dealers who may not take in the convention, and especially those handling minerals, should join the convention in spirit by featuring N.C. minerals in their ads.

Let us all get behind the coming convention and really give it a big boost!



WORLD NEWS

ON Mineral Occurrences

ITEMS ON NEW FINDS ARE DESIRED
PLEASE SEND THEM IN.

ALABAMA—"Muscovite mica is found in Alabama in nice book form. I have some specimens that are quite showy, small xls about $\frac{1}{2}$ " across in small books running in every direction making a rather catchy specimen in hand sizes and larger. I have specimens of single books about $\frac{1}{2}$ " thick and up to 4 x 3" across their face.

"A good locality for muscovite are the abandoned sites of Eureka Mica Mine about 3 miles north of Pyriton, Clay Co., Ala."—note from James Miller Davis, 212 Guaranty Savings Bldg., Montgomery, Ala.

(Please send us some more notes, Mr. Davis.)

ARIZONA—J. G. Waters, 327 Chestnut St., Kingman, Ariz., is offering collectors some very nice unpolished slabs of quartz containing small masses of native silver (see his classified ad on p. 89, 2nd col., Jan.-Feb. 1958, R&M). A sample slab was sent to this dept.—it is 1 x 2 inches in size, and consists of silvery native silver, black pyrrargyrite, red proustite and brassy-yellow pyrite all imbedded in smoky quartz. The locality is the Cerbat Mts. of Mohave Co., Ariz.

ARKANSAS—"A couple of odd xls from Garland Co., Ark., about 7 miles due west of Jessieville. I found them last week. Hope you enjoyed them."—note dated July 6, 1957, from Capt. Geo. W. Owens, Hq. Sq., 384th Bombardment Wing, Little Rock Air Force Base, Jacksonville, Ark.

Two interesting rock xls, each $1\frac{1}{4}$ " long, were received. One enclosed $\frac{1}{2}$ of a rock xl, the other enclosed a wedge-shaped platy black xl believed to be titanite (sphene).

CALIFORNIA—"I am enclosing two meteorites which might be of interest in your 'mineral occurrences' column. The meteorites are from a new fall near the Calif. border, around Needles (San Bernardino Co.), Calif. They have been polished on one end, but have not been put in acid for markings."—note dated Sept. 18, 1957, from Shale's, 9226 W. Pico Blvd., Los Angeles 35, Calif.

Two small but complete meteorites were received. They are of a dark brown color and take a beautiful polish—color of polished face is silvery white.

From near Ft. Point, San Francisco (San Francisco Co.), Calif., we have a most interesting specimen that was sent in by Lu Watters, P.O. Box 88, Cotati, Calif. The specimen consists of tiny slender, colorless aragonite xls with beach sand on a matrix of dark greenish serpentine. The beach sand consists of various colored cherts, jaspers, quartz, serpentine, etc.

COLORADO—"Here are some Colorado localities where minerals may be collected. None of the mines mentioned are operating and no watchmen are in residence so I guess collecting is free. Rockhounds, of course, should never go inside a tunnel. Old buildings, too, are dangerous and should be explored with caution."—letter dated Aug. 1, 1957,

from Pat Fancher, Box 63, Ouray, Colo.

"From Silverton's Anvil Mountain (north about 8 miles from Silverton, San Juan Co., Colo.) run the Red Mountains, a caldera in which the rocks are highly altered and the minerals distinct from the surrounding area. The black copper mineral, enargite, is present in all the ore shoots, not infrequently in small xls. Another distinction is the brilliant, sharp octahedrons of pyrite. Always small, the pyrites are uniform in size and perfect in form. They remain brilliant after more than 50 years on the dumps. Inquire in Ouray or Silverton for the turn-off to Red Mt. Town (a ghost town) tho you can drive to it $\frac{1}{2}$ mile off the Million Dollar Highway."

(to be continued)

CONNECTICUT—The following notes on Connecticut minerals were sent in by Richard Schooner, P.O. Box 215, East Hampton, Conn.

"Two years ago, shortly after my discovery of triphylite and several of its alteration products at the State Forest No. 2 Mine, in Cobalt, Connecticut, Ronald Januzzi, the proprietor of the Dinosaur Mineral Shoppe near Brewster, New York, made a visit to the locality. We had both been interested in the rare phosphates for many years, and it was a novelty to see those of triphylite derivation in this part of New England. I was in Colorado at the time of his trip to Cobalt, and it was just recently that we had a chance to get together and compare notes. He told me that herderite crystals had been observed on a single specimen, and verified at the American Museum of Natural History. This prompted me to re-examine a specimen in my own collection, which I had thought might be herderite. There can be little doubt now. My specimen shows perhaps twenty-five perfect little pale yellow crystals, with what appear to be altered crystals of siderite, in a vug at the contact between albite and beryl. This is another new one for Connecticut in general, and the Middletown area in particular.

"A couple of local collectors have re-

cently found "firsts" at the famous old Slocum Quarry, near East Hampton. Bob Gallant obtained lean specimens of colorless scheelite in the country rock, while searching for manganapatite, hyalite, and the rare green fluorite with a Mineralight. Kenny Schoell chiselled out a small area of presumably calcic pegmatite, enclosed in the country rock, and obtained one piece which shows green beryl crystals with two spots of pink fluorite... the latter a new variety of the mineral for the locality.

"Still another mineral has been found at Collins Hill, near Portland. In going over some examples of the chalcopyrite, bornite, and malachite from the quartz-epidote vein that yielded those species (described in an earlier note), I found a trace of blue chrysocolla. Unless I can obtain more of the material, chrysocolla may go down as the rarest mineral among the hundred or so which occur on the hill.

"At a recent meeting of the New Haven Mineral Club, Ronald Januzzi had a table full of specimens that should have been an inspiration to any collector in the New York-Connecticut area. In addition to many rarities from Tilly Foster, he had Branchville items that were dug out of the old dumps... things which are supposedly not obtainable in the present era (such as three or four inch masses of solid cvrtolite, parts of big eosphorite crystals, a few pieces of triploidite, and large smoky quartz crystals). Of even greater interest were a group of superb uraninite crystals from a small pegmatite in Bethel, and incredible specimens showing tiny wulfenite, pyromorphite, and cerussite crystals in vugs of ordinary pegmatite! I believe there are only two other places in the United States where such secondary lead minerals have been reported from pegmatites. He also mentioned surprisingly large bertrandite crystals from the same place. Another fine specimen of uraninite was from a pegmatite in Ridgefield.

"Mineral collecting in Connecticut is far from dead these days!"

DELAWARE—Pebbles of pale pinkish chalcedony have been found on the south side of Indian River Inlet, Sussex Co., Del., by Bob and Hazel Reynolds, 470 Stocksdale Rd., R.D. 2, Glenarm, Md.

FLORIDA—Southeastern Mineral Co., Box 2537, Lakeland, Fla., have donated a dark grayish mass of chert.

"Chert from west of Ocala, Marion Co., Fla. Weathered from Ocala Limestone. Large blocks of chert are seen along all the highways in the area with some showing drusy quartz."—on label.

GEORGIA—"Terminated sillimanite crystals are found on the farm of Mr. J. H. Fowler, seven miles east of Ellijay, Georgia, in Gilmer County. The crystals are flattened parallel to *a*, elongate parallel to *c*. The largest crystals are 1-1½ cm across parallel to *b*, and up to 0.6 cm parallel to *a*. They are gray, translucent to transparent.

"Terminated sillimanite crystals are rare, and previously have not been reported in Georgia."

Mineralogical notes by Vernon J. Hurst, Georgia Mineral Newsletter, Summer 1957, p. 55 (Published by the Georgia Geological Survey, 19 Hunter St., Atlanta, Ga.—A. S. Furcron, Editor).

IDAHO—"I am sending you a small specimen of what looks like obsidian with tiny veinlets of a white mineral through it. This was found on Willow Creek, about 35 miles north of Boise, Idaho. The vein was thin and I only had an Estwing pick with me so I couldn't get out anything but small pieces."—letter dated Nov. 15, 1957 from Manuel T. Lee, 496 Morris Ave., Boonton, N.J.

The specimen is a lustrous black obsidian with very thin veins of white chalcedony.

ILLINOIS—"I have mailed you a fluorite specimen that I have not seen in any museum—a recent discovery of a small area in the Rosiclare fault. This is the **TETRAHEXAHEDRON**. It has some hundred faces and twins and is a very pretty pale lilac in sunlight. I es-

timate this may happen in the Illinois-Kentucky fluorite area one time in ten million. It is a phenomenon with some cause not understood—just like the natural octahedron of high temperature."—letter dated June 17, 1957, from Ben E. Clement, P.O. Box 69, Marion, Ky.

This is the rarest fluorite specimen we ever saw. It is 3x3x3 inches in size (weighs 1½ lbs.) and beautifully xled. Its color is pale lilac. Amber-yellow calcite xls encrust it. Tiny xls of pale brassy yellow marcasite and brassy yellow pyrite are also present as well as small blackish spots of oil.

"Very Rare fluorite. Tetrahexahedron xls. Rosiclare Fault, Rosiclare (Hardin Co.), Ill. With marcasite, pyrite and oil inclusions and with calcite xls after mineralization. Note several colors with short wave, also good long wave UV.

"This is so rare no men here have ever seen any before. First I have seen that I recall in 38 years in Ill.-Ky. Note with 3 or 10X glass, as you turn specimen slowly, that the thin laminations have a 'cut a way' on each side. The ideal crystal would have 4 times six sides or 24 as the name reads. I consider this type of xl here one in a million."—on label.

INDIANA—From a small black shale quarry (Mecca Quarry) near Mecca, Parke Co., Ind., the Chicago Natural History Museum of Chicago, Ill., has collected thousands of tiny fossils, many of which are primitive vertebrates of completely unknown types that must be assiduously prepared and studied and described.—Chicago Natural History Museum Bulletin, June 1957, p. 3.

IOWA—"Under separate cover you will receive 3 specimens from my area. Nos. 1 and 2 came from a strip mine (coal) 5 miles east of Knoxville (Marion Co.), Iowa. No. 3 came from a road cut 3 miles north of Lovilia (Monroe Co.), Iowa. Will you please identify these for me? You may use them in your World News on Mineral Occurrences if you wish."—letter dated Nov.

18, 1957, from Leonard Sickler, Rt. 2, Lovilia, Iowa.

No. 1 consists of small groups of colorless calcite xls on dark brown drusy calcite which in turn is on dark gray massive limestone.

No. 2 colorless calcite xls on dark brown calcite xls on dark gray massive limestone. Both specimens are very nice.

No. 3—Brownish 2 x 3 sand concretion whose interior is a compact mass of sand. (see Sand Collector—this issue)

KANSAS—Large xls of halite, some of which occasionally contain movable bubbles, are found in the salt mine in Hutchinson, Reno Co., Kans.

KENTUCKY—A very nice specimen of grayish, banded chert, with one face polished, was sent in by Maj. Raymond V. Prueitt, Sulphur, Ky.

"Banded chert, Louisville (Jefferson Co.), Ky. Waterson Express Way Underpass, Preston St. and Kentucky Turnpike."

"The chert is found in limestone and appears to be what was once very large Mollusks. There are two layers only about 4 feet apart that contain the chert. Each layer is composed almost entirely of the chert and covers the entire area on this series of cuts (two sets of underpasses and cloverline interchanges)."—on label.

LOUISIANA—Red jasper pebbles of good quality occur in a large gravel pit near Monroe, Ouachita Parish, La.

MAINE—From Woolwich, Sagadahoc Co., Me., we have some minerals that were sent us by Henry P. Donnell. In his letter, dated July 31, 1957, he writes:

"The rocks on the new road cut in Woolwich are really beautiful and different for this area. Anyone wanting further information or directions may stop in or phone us when up this way—Henry P. Donnell, RFD 1, West Bath, Maine—phone 3-4540."

The minerals received from Mr. Donnell are:

Albite—White striated masses in coarse

white granite stained green by malachite

Covellite—Dark blue (small mass with malachite in white albite granite that is stained green by malachite) Black dendrites (manganese oxide) is coating on one of the granites.

Malachite—Bright green stains and incrustations on black biotite and smoky quartz. "From deep cut by river on new highway in Woolwich, Me."—on label.

Microcline (Amazonstone)—pale green mass with black biotite and smoky quartz.

Quartz (Amethyst)—Translucent, pale purple xl.

"Amethyst from thin seam beside the road between Woolwich and Wiscasset, Me.

"This amethyst was all on the reddish color—it was pretty badly damaged by dynamite blasting when highway was put thru. We haven't been able to find anymore in the area so far. We have about a water bucket of fair to good and a bushel of poor specimens."—on label.

MARYLAND—"On the western shore of Chesapeake Bay, about 35 miles south of Annapolis, in Calvert Co., Md., is Chesapeake Beach.

"On Sunday, Sept. 22, 1957 we visited Chesapeake Beach with Mr. Perry Carroll. The beach here is protected from erosion by a high sea-wall for a distance of a ½ mile.

"We walked south along the top of this wall to the cliffs which were to be seen in the distance. As soon as we descended to the beach at the end of the wall, Hazel found 2 shark's teeth in the surf. All three of us picked up bone as we proceeded toward the first headland which jutted out from the shore. The water was higher than usual due to a SE wind, but we managed to wade around this cliff without getting splashed too badly, and into a small cove. Mr. Carroll said that he usually finds more fossil remains farther on, but we'd have needed bathing suits to get around the next cliff.

"We spent about 2 hours in this tiny cove. The "sand" is composed almost entirely of broken shell tapering off abruptly to the clay of the rising ground, then to the woodland behind. At first we searched in the breaking waves for teeth with good results, but when we tired of wading and sat on the narrow shelf, we found that by sifting through the mass of shell particles, we found equally as many teeth. (Also some helgramites which we didn't particularly like the looks of). Mr. Carroll found 22 teeth, and we two found over 30 between us. They ranged in size from $\frac{1}{4}$ " to 2" long. We soon were able to spot them at a glance and we missed many when a wave broke too quickly. The larger teeth were imperfect for the most part, but the smaller ones were mostly whole. We found a few pieces of bone here, but much more next to the sea-wall. We gather from this that the teeth are of earlier origin, beneath the layer where the bone is to be found. The shell collector would do much better farther south at Kenwood Beach.

"All told we had a very rewarding trip and came home with more loot than we did Labor Day of '56. We plan to send you some teeth and bone soon for your collection."—letter dated Sept. 25, 1957, from Bob and Hazel Reynolds, RD 2, 470 Stocksedale Rd., Glenarm, Md.

We received some specimens, 10 in all, beautifully mounted on a 4 x 6 varnished wooden plaque. One specimen was a brown, flat petrified wood, 2 inches long. Another was a gray, flattened and partly hollow petrified bone, 2 inches long. Five small dark gray, and 2 larger light gray petrified shark's teeth and a white fossil sea shell, 2 inches long, were the remaining specimens. The teeth varied from $\frac{1}{2}$ to $1\frac{1}{4}$ inches in length.

"FOSSILS. Chesapeake Beach, Calvert Co., Maryland. Teeth, Shell, Bone and Wood. From Miocene Era."—on label on plaque.

A dark gray (almost black) rounded flat mass (disc-shape) of coral limestone

was also found on the beach by the Reynolds.

MASSACHUSETTS—"It has been many years since first subscribing for R&M, in all that time I have had no news to offer, but recently hit upon an occurrence that you might be interested in.

"By separate mail a package should arrive soon. It has a small fulgurite specimen enclosed, the first one ever actually seen by us in place. It was brought to my notice about a month ago by Joseph Shea, the gemologist over in Clinton, Mass.

"In Northboro (Worcester Co.), Mass., along the aqueduct from Clinton to Boston, a lightning bolt hit an insulator on a power line, smashing it, from there it went directly to the ground, striking a stray piece of copper wire that ran for approx. 450 feet, skipping along the surface, melting the wire and dipping into the earth fusing it in spots. It was a real big one and happened as near as I can find out, either the last of May or first of June of this year. Was discovered by the power crew that replaced the insulator. I am planning on offering specimens for sale in R&M.

"We have two real beauties that we feel are worthy of being called museum pieces. One is $3\frac{1}{2}$ feet long, $4\frac{1}{2}$ inches in diam. at one end and tapering to $1\frac{1}{2}$ inches at the other end, unfortunately it broke in lifting it out—four pieces now but still huge. The other specimen is the real thing as far as I am concerned, about 8 inches high and forking out at the bottom to 14 inches wide.

"We have 350 nice specimens, other than the two large ones. A real good find for us.

"I have found very little reference to fulgurites in publications, and so thought this find interesting and unusual enough to write about."—letter dated Nov. 18, 1957, from Joseph P. Stachura, 8 Upton St., Millbury, Mass.

What an interesting specimen we received! It is $3\frac{1}{2}$ inches long, $\frac{3}{4}$ inches

diam. at one end, $\frac{1}{2}$ " diam. at the other, with 4 tiny branches. At first glance one would take it for a part of a tree branch but examination soon proves otherwise. Its exterior is dark gray and pitted, where broken, the interior is a yellow-green, deeply pitted glassy structure. It is much heavier and not at all fragile like the usual fulgurites found on sandy beaches.

Though we have a number of fulgurites from various localities, we have yet to find our first specimen, so Mr. Stachura you are ahead of us, as far as fulgurites go.

The following references on fulgurites have appeared in R&M:
Nov. 1945—Nags Head (N.C.) and fulgurite, pp. 523-525, by Jeff Hill.
April 1946—Fulgurite in New Jersey, p. 220.

June 1946—Fulgurite in Michigan, pp. 354-355, by Harvey Franz.

Oct. 1947—Something new in fulgurite, p. 923, by Jeff Hill.

Dec. 1947—Fulgurite of San Clemente Island, Calif., pp. 1119-1121, by M/Sgt. J. O. Griesbach.

Sept.-Oct. 1948—Unusual limonite forms from Mich. pp. 802-806 by Jeff Hill.

Sept.-Oct. 1949—Unusual limonite forms from Mich. (2nd report) pp. 458-461, by Jeff Hill.

Nov.-Dec. 1949—Comments on limonitic "fulgurites"—pp. 606-607, by H. O. Albrecht.

Jan.-Feb. 1950—Fulgurite hunter makes "killing"—p. 23, by Mayme Myers.

Mar.-Apr. 1950—Fulgurites p. 135, by Paul Hurd.

MICHIGAN—"I have sent you a crystal of sulfur from the old Woolmuth quarry, located between Maybee and Scofield, in Monroe Co., Mich. This quarry has very recently started operations and I was fortunate enough to get some good crystals. Some of the crystals found by the fellows with me were very large, $2\frac{1}{2}$ " x $3\frac{1}{2}$ ", doubly terminated. A few crystal groups on white calcite (fluor. & phos.) were also obtained. Several plates of celestite, short trans-

parent, very slightly blue-gray. Crystals ($\frac{1}{4}$ " to $\frac{3}{4}$ " crystal size) 4" x 6" were also found.

We sure had a real field day there.

"From Mr. Radloff I obtained a geode half 22" wide, 15" deep and 8" thick, full of large rich deep blue-gray celestite crystals $2\frac{1}{2}$ " wide by 5" long—surely a rare beauty. This came from the Rockwood quarry (Rockwood, Wayne Co., Mich.) where they mine the sand of which I sent you a sample. Cream-white and opaque calcite crystals in geode fluoresce and phos. good. Good amber to tan crystal groups of calcite are still plentiful at the Monroe (Monroe Co.) Mich. quarry."—letter dated Oct. 20, 1957 from Edwin Skidmore, 253 Central Ave., Mountainside, N.J.

A beautiful sulfur-yellow sulfur crystal was sent us. It is doubly terminated $1\frac{1}{4}$ " x $1\frac{1}{2}$ " in size and one of the finest sulfur crystals we ever saw from an American locality.

MINNESOTA—Interesting greenish, also dark gray, porphyry pebbles have been found in the gravel pits around Hopkins, Hennepin Co., Minn. by Adolph A. Sidla, 201-15th Ave. No., Hopkins, Minn. Some of these pebbles should take a beautiful polish with pleasing designs.

MISSISSIPPI—In the May-June 1957 R&M, p. 243, we mentioned a petrified forest near the town of Flora, Madison Co., Miss., on Highway 49. Here is another item dated July 25, 1957, sent by Dr. Philip Pizzolato, 1415 Broadway, New Orleans 18, La.

"We have just returned from the petrified forest in Mississippi. The forest is located off of U.S. Highway 49, about 15 miles north of Jackson at the edge of a town called Flora and can be reached by a good gravel and dirt road, about 2 miles from the main road. The trees are in large gullies, exposed by weathering of red and yellow clay and sandy soil. Some trees are two to four feet in diameter and 5-15 feet long. Mr. James P. Black is the owner and gives a personal tour. It is opened

to the public and admission fee is 55 cents. A sample of the wood is being mailed to you."

The specimen received is $1\frac{1}{4}$ " x 2" in size, of a whitish color but streaked with brown, and though of good quality it is a little too cellular to take a good polish. A depression in one face is lined with brownish drusy quartz xls.

MISSOURI—"The possibilities for mineral hunting here around St. Louis, Mo., seems bountiful and I believe the rock-hounds hereabouts have been overlooking a lot of fine material, some even exotic-like.

"I am donating a few specimens to you from a new occurrence of nickel in the St. Louis area, in Lincoln Co., Mo., from a quarry where agricultural limestone and dolomite is gathered. All the nickel occurs in flint nodules with white chert alteration band on outside. Also in clear calcite rhombs (nodular or geode forms). Some is web-like and partially free from matrix, most imbedded as threads or grains. Some of the nickel (millerite) has altered to manganese, limonite and annabergite. The latter occurs in threads (rare), grains and stains—all of a greenish color. The best occurrence of annabergite is in the form of 'sunburst' sprays, light delicate green in color. The millerite golden 'sunbursts' (name is my own application) are going to be a very popular item, if I can get them introduced to folks. The good specimens have been selling well at \$3.50 each.

"The nickel minerals (millerite and annabergite) occur in medium gray, massive dolomite lenses, between layers of yellow and whitish-gray limestone. The nickel minerals may occur associated with sphalerite, marcasite, pyrite, etc. The nodules and geodes have a shell of quartz, some of it in doubly terminated xls, as small as $\frac{1}{16}$ inch. Often inside this thin shell is some black alteration product (sometimes zinkenite, I think, gray in color, latter is rare). Inside the second layer is calcite in acute rhombs. The calcite apparently was

the last to form in the center and in doing so it has often disturbed the millerite threads, breaking up the weaker ones into tiny brassy grains. Some of the calcite is literally black with altered millerite. Another intimate association of the nickel minerals is white, feathery xled barite."—letter dated Aug. 9, 1957 from Geo. C. Dick, (Argyle Mineral Shop), 9207 Argyle, Overland 14. Mo.

Some very interesting millerite specimens have been received from Mr. Dick, all sunbursts made up of brassy-yellow, needle-like xls. One specimen shows millerite altered into black pyrolusite (manganese), and another to brown limonite (iron).

MONTANA—"Three Forks (Gallatin Co.), Montana: Pyromorphite in yellowish-brown barrel shaped xls ($\frac{1}{16}$ ") on a gangue of calcite xls, were found in a rock quarry near Three Forks. The calcite fl. and phos. a cream to white in short wave ultra-violet light. The specimens are valued more for the pyromorphite, however."—item sent in by Gerald Navratil, RFD 2, Box 70, Middleburg, N.Y.

NEBRASKA—"R&M is my favorite mineral magazine and I enjoy very much reading it. I especially like World News on Mineral Occurrences and notice that you usually have very little material on Nebraska, so will send you a few items which I hope will help you out.

"Low grade uranium ore (carnotite) has been found in Banner County, Nebraska.

"Flat, tabular xls of light blue barite are also found in Banner County, Nebraska.

"There is only one town in Banner County, which is Harrisburg (pop. 87), and there are no roads from Harrisburg to this particular part of the county. The closest town to the location of these minerals would be Dix, which is in Kimball County. Perhaps it would be easier to pinpoint it as southeastern Banner County. The carnotite and barite as well

as the ilmenite sand (see Jan.-Feb. 1958 R&M, p. 28) come from within a mile or two of each other."—item sent in by Mrs. Robert Cook, Callaway, Nebr.

(Please, Mrs. Cook, send in more items)

NEVADA—"Scheelite may be found in the Washoe Range, north of Carson City (Ormsby Co.), Nev., overlooking Washoe Lake.

"Arrowheads and chippings are abundant around the shores of Washoe Lake, about 6 miles north of Carson City on Highway 395."—note sent in by A/2c Lawrence E. Wright, 55 PMS, Box 119, Forbes AFB, Kansas. Mr. Wright's home is in Carson City, Nev.

NEW HAMPSHIRE—We get so many items for World News that now and then an important one gets overlooked, much to our regret. Here is one that should have been printed months ago. It is dated May 19, 1957, and comes from James W. Burke, North Amherst, Mass. (our apologies are extended to Mr. Burke for this late appearance of his item).

"Recently I have had some correspondence with Mr. William Henderson, a graduate student in Chemistry at Yale University and an ardent mineral collector. Some weeks ago Bill asked me to go on a trip to New Hampshire. I couldn't get away at the time and he went with a friend from Harvard.

"His letter telling about the trip gives some idea of what a collector is willing to go through for the sake of his hobby. He sounded pretty discouraged. Then came the surprise; his second letter shows that even the poorest of trips can have a happy ending.

"Perhaps you could use these two letters in R&M."

Mr. Henderson's first letter, dated April 27, 1957, to Mr. Burke reads:

"Here is the promised letter re our trip to New Hampshire.

"On April 18, I left Cambridge, Mass. with a friend of mine who is going to

Harvard. We arrived in Raymond, N.H. about noon and visited three quarries but found little of note.

"From there, we went to Grafton (Grafton Co.), where we found the Palermo Quarry and spent a couple of hours picking up phosphates and some very lean uranium specimens. That night, we camped out on the hill at the junction of two brooks, and was it cold. We watched the northern lights for a while, and then fell asleep, my companion shivering and groaning for a good deal of the night. Next morning, we again went to the Palermo and found more of the same stuff. On the way in, we passed two hundred-foot beaver dams, and saw the biggest porcupine I have ever seen.

"Next, we went to the Fletcher Mine in the same town, where we collected more phosphates. Also some golden beryl in large crystals and fragments of gem (?) aquamarine.

"About noon, we went to Bristol, and had our first full meal since breakfast of the day before. After eating, we went to Grafton and found the Ruggles Mine completely closed to collectors. We talked to one of the operators, and he said little had been found in a long time.

"By then, we were pretty discouraged with the collecting and, finding there was no place within thirty miles where we could stay overnight, we headed for home.

"All in all, a pretty poor and uncomfortable trip. There was a good deal of snow on all the roads up the hills, so it was put one foot up to knee level and then sink back a foot. Brooks were running down most of the mine roads, and it seems that every mine is a mile and a half up a steep hill."

The second letter to Mr. Burke, dated May 10, 1957, reads:

"I was very glad to hear from you again, and am writing immediately, as I have quite a bit more to tell you about that rock trip. It has turned out to be nowhere near as unsuccessful as we had thought.

"Last week, I visited Neal Yedlin, the

yellow who writes the micromount column in R&M, and I toted along all the specimens we collected in New Hampshire. He was able to confirm what identifications I had made, and identified many other minerals which were completely new to me.

"It seems that at the Palermo Mine we collected large masses of blue-green triphylite; masses of heterosite, which turn a rich purple on soaking in dilute Hcl.; whitlockite in masses and micro crystals; acicular, micro crystals of strunzite; orange laueite crystals; massive, dark green rockbridgeite; lazulite; vivianite; yellow hureaulite; siderite; and three other crystalline phosphates which Mr. Yedlin could not identify.

"Most of the material from the Fletcher Mine was junk, but on one piece of rock the size of an egg Mr. Yedlin found yellow, fibrous xanthoxenite; orange-yellow, triclinic crystals of laueite; pale lavender balls of metastrongite; rockbridgeite; and leucophosphite, a mineral rare enough to make the whole trip worthwhile.

"More good news; I am getting a microscope with which I can really give these specimens a going over."

NEW JERSEY—From Mineral Exchange of N.J., 38 Park Way, Mountainside, N. J., we have received a sample shipment of their special offer to collectors—"Best grade of various patterns of fluorescent willemite and calcite with associated minerals of cutting quality"—see their ad on p. 163, this issue. Four minerals (2½ lbs.) with the most brilliant fluorescence and designs were received and their locality is the world famous Franklin, N. J., area (Ogdensburg, Sussex Co., to be exact). The specimens were selected by Edwin Skidmore (one of the proprietors of Mineral Exchange) who is recognized as an authority on Franklin, N. J., fluorescent minerals.

"I recently finished reading 'How to collect Minerals' which I enjoyed very much.

"While reading I found that you (the Editor) specialize in molybdenite. We live close to the Royal Green Quarry in Phillipsburg (Warren Co.), N.J., which yields serpentine, tremolite, asbestos, tale, pink calcite and also molybdenite.

"Please accept the enclosed sample, without obligation.

"I am a subscriber for your wonderful R&M."—letter dated Oct. 15, 1957, from Mrs. Donald Sinkway, 118 N. Prospect St., Washington, N.J.

This is one of the nicest molybdenite specimen we ever saw from the Royal Green quarry. It is 3" x 4" in size and full of small lustrous, lead-gray molybdenite flakes in a light green serpentine matrix.

NEW MEXICO—"The Hansonburg District is in the Oscura Mts. in the S.E. corner of Socorro Co., N. Mex. The nearest post office is Bingham, although it consists of only a general store and a couple of houses. (The first Atom Bomb was released only about 8 miles away to the S.W. on the great plain known as Jornada del Muerta). There are several mining operations in those hills. The main ore mineral is galena but barite is saved or separated at one operation. There is much fluorite also but no serious effort has been made to separate it. I don't think it has ever been feasible to separate the copper. Some of the fluorite xl groups from here are quite spectacular—range from purple to blue to green, and have even seen a delicate pink. The galena cubes are mostly altered on the surface to anglesite; sometimes the anglesite is again coated with tiny quartzoids and also with bright blue linarite.

"Some years ago we recognized that there were numerous green minerals in the Hansonburg District which were not malachite but we were not able personally to run the identifications. Dr. Arthur Montgomery (who owns the famous Harding Mine and is Professor of Geology at Lafayette College) should get the full credit for identifying span-

golite, atacamite, and brochantite. My part in picking up the minerals is purely of little significance. Dr. Northrop is currently revising his book, *Minerals of New Mexico*, and hopes to have it out by the end of the year. He will mention in detail the new finds in Hansonburg."—letter dated July 1, 1957, from Walt Wright (Prospectors Shop), 201 W. San Francisco, Santa Fe, N. Mexico.

A very beautiful specimen from the Hansonburg District was sent in by Mr. Wright. It consists of lustrous, deep azure blue linarite xls, emerald-green spangolite xls, bright green atacamite xls, some green malachite xls, tiny rock xls,—all on a quartz matrix.

"Check this with your microscope. Only then can you appreciate this fairy land of xls.—wanted you to have one of these superb groups."—on label.

NEW YORK—"Enclosed please find three photographs of some of the largest black tourmalines from Pierrepont (St. Lawrence Co.), N. Y., found by James Cronin, Earl Scherer, and Robert Eaton of Rochester, N. Y.

"I would say, from all reports, that these are about the largest to have come from that locality in years. The largest, photo #1, weighs four pounds and is approximately 4 x 4 inches in size. The next largest, photo #2, is about 3 x 3 inches and weighs two pounds. The third photo shows two of the smaller ones which weigh about one-quarter pound each and are about 1½ inches in size.

"Under separate cover I am sending you one for your collection. These were found in a pocket lining the sides and bottom. Most were fractured badly and



3x3 black tourmaline xl, 2 lbs. weight. This is the second largest tourmaline xl found at Pierrepont, N. Y., by Robert Eaton, James Cronin, and Earl Scherer.

some were found loose. Outside of the few larger ones, all the small ones showed only two to four facets."—letter dated Sept. 15, 1957, from Robert M. Eaton, 54 Heberle Rd., Rochester 9, N.Y.

A beautiful lustrous black tourmaline xl was received. It is 2 x 3 inches in size and doubly terminated.

NORTH CAROLINA—"Enclosed is my renewal for R&M for another year. I want you to know that I surely have enjoyed reading it—don't think I could get along without it now.

"Last February while exploring for sheet mica on my farm located 11 miles west of Shelby, in Cleveland County, N.C., I discovered a deposit of muscovite mica crystal clusters. Am sending you a few small specimens. Look at the crystals edgewise as some of them show a beautiful translucent green. I have sizes of them from a few grams up to 50 pounds.

"The geologists and mineralogists in this area tell me that the deposit I have of these beautiful clusters is the only one they know of in the United States. I have made an extensive investigation and have been unable so far to find another area around here where they can be found. Would like to know if you know of any other area where they can be found."—letter dated Nov. 25, 1957, from L. Yates Brooks (Mica Crystal Man), Rt. 4, Shelby, N.C.

What a pleasant surprise! The specimens turned out to be the finest xled muscovites we ever saw. Lustrous, dark gray, sharp faces! The smallest specimen, 2 x 2½ inches in size, is a mass of beautiful muscovite "gems", and looking thru these little "gems" edgewise, they show a beautiful translucent sea-green. The faces of some of the xls show a beautiful iridescence (play of colors). We know of no other area where good xled muscovites, such as these, are to be found.

NORTH DAKOTA—In Hettinger County, N.D., lignite outcrops at a num-

ber of points on Coal Bank Creek, 8 miles south of New England.

OHIO—Greenish glauconite encrusting brownish dolomite occurs in limestone outcropping near Ohio Brush Creek, near Lynx, Adams Co., Ohio.

OKLAHOMA—Colorless xline calcite masses in reddish calcareous nodules have been found on Hwy. 66 east of Arcadia, Oklahoma Co., Okla., by Glen E. Kiser, Douglass, Kans.

OREGON—An interesting gray, fossiliferous shale from Timber, Washington Co., Oregon, has been sent in by Mrs. Roberta Jensen, 8709 S.W. 56th St., Portland 19, Ore.

PENNSYLVANIA—Nice rock xls have been found in the anthracite coal mines around Shamokin, Schuylkill Co., Penn.

RHODE ISLAND—A yellowish and greenish serpentine found at Limerock, Providence Co., R.I., was first called nephrite in 1822. Later it was called bowenite after Mr. Bowen who showed that it was not nephrite. Still later in 1853, it was shown that bowenite is not a distinct mineral but is a variety of serpentine.

SOUTH CAROLINA—Magnetite, associated with hematite, occurs along Broad River above Cherokee Ford in Cherokee Co., S.C.

SOUTH DAKOTA—"Sent herewith is a sample of rock collected on a recent trip to the Badlands of South Dakota. The S.D. School of Mines in Rapid City, S.D., identified it as chalcedony (bostryoidal). It is fluorescent under the short wave lamp. The purpose of the trip was agate hunting in the Fairburn and Oelrichs beds in southwestern S.D., but the results of that were disappointing, however we have samples of this chalcedony for exchange.

"The locality for the chalcedony is between Imlay and Scenic, in Pennington

Co., S.D."—letter dated Oct. 25, 1957, from Lee E. Payne, Rt. 1 (Eagle Lake), Willmar, S.D.

The specimen received is a flat botryoidal mass, very light purple on the outside with a whitish center. Under the long wave one surface, fl. blue (like scheelite) due to a minutely thin, colorless crust of some unknown mineral coating the chalcedony.

TENNESSEE—"Inclosed herewith is a small specimen for your identification and World News column, if you please.

"Specimen comes Roane Co., Tenn., about one mile south of Kingston on the east bank of the Tennessee River. These xled specimens are plentiful."—on label of specimen sent in by Zelma H. Wright, Jr., 3105 Dundalk Ave., Baltimore 22, Md.

The specimen consists of colorless drusy quartz xls in cavity of a brownish stained light gray chert.

TEXAS—A loose dark brown fossil brachiopod from the Pennsylvanian limestone at Salesville, Palo Pinto Co., Texas, has been sent in by the Renfro's, 2901 Bomar Ave., Fort Worth 3, Texas.

UTAH—A nice polished slab of reddish petrified bone (agatized) from near Moab, Grand Co., Utah, has been sent in by Dr. A. L. Inglesby, Torrey, Utah.

VERMONT—From Peacham, Caledonia Co., Vt., we have a specimen of dark gray granite coated with a white crust of hyalite (opal). The hyalite fl. green under s.w.

Specimen was sent in by Milton E. Ailes, Box 36, West Danville, Vt.

VIRGINIA—"Hope you can use this in World News on Mineral Occurrences.

"Just mailed you a few xls of stauroilite. These xls are found off Fairy Stone Park highway in Patrick Co., Va. (near the Henry Co. line), 3 miles from the

Park entrance. The small holes in the xls are cavities formerly occupied by garnets."—letter dated Aug. 12, 1957, sent in by Bill Carter, 1524 Wellsley Ave., N.W., Roanoke, Va.

A number of loose, brown twinned xls were received (the xls are gray in color but heavily coated brown by clay). Two specimens of brown stained mica schist, with many staurolite xls imbedded, were also received.

WASHINGTON—Greenish epidote pebbles have been found at Friday Harbor, on the east coast of San Juan Island, San Juan Co., Wash.

WEST VIRGINIA—Colorless selenite xls have been found in Trout Cave, 3½ miles southwest of Franklin, Pendleton Co., W. Va.

WISCONSIN—Quartz pebbles have been found at Seneca, Crawford Co., Wisc., that are almost completely coated by brown limonite—the limonite fitting like a glove. One of these interesting pebbles was sent in by Meredith A. Frey, Mount Hope, Wisc.

WYOMING—Large deposits of Chromite occur on Casper Mountain, Natrona Co., Wyo. Chromite is black in color and is the chief ore of chromium.

ALASKA—Small lustrous black masses of ilmenite, and small, dull black masses of magnetite, were received from Frank Waskey, Oakville, Wash.

"Sluice box concentrates from Basin Creek, tributary of Snake River, Nome, Alaska."—on label of each mineral.

AUSTRALIA—The following letter, dated Dec. 27, 1957, comes from Roger C. H. Doo, 35 Day St., Drummoyne, Sydney, NSW., Australia.

"I am sending you under separate cover a xl prism of rhodonite which was found a year ago on the 3350 level, North Mine, Broken Hill, N.S.W. Australia.

"The rhodonite occurred in compact

masses of sphalerite and galena, sometimes with massive rhodonite, in groups of xls some few inches long and of very fine color. This is the first time that fine rhodonite xls came to light since the 1500 and 1750 levels have been worked out eleven years ago.

"I am also sending you with this letter a photo of superb anglesite xl which I have acquired some time ago; it came from the 300 level (now worked out) Proprietary Mine, Broken Hill. The original specimen is $1\frac{3}{4} \times 2 \times \frac{1}{2}$ inches in size, light wine-yellow in color, twinned and doubly terminated, examined by various authorities in Sydney and Broken Hill they all agree that this is a unique and the very best specimen that has ever come out from the mine. It fluoresces under the U-V lamp.

"As I feel this is a most unusual specimen, I wonder whether it is at all possible to reproduce it on the front cover of R&M so to let collectors see this wonderful item.

"Thanking you and best wishes for a Merry Christmas and a Happy New Year."

A beautiful translucent, rose-pink xl,

$\frac{3}{4}$ " long, was received from Mr. Doo. It is the finest rhodonite we ever saw.

Other minerals received from Mr. Doo are:

Pitchblende: black mass encrusted with brownish rutherfordine, and greenish meta-torbernite. Brown Kasolite xls occur in a vug in the specimen (light brown xline sklowdowskite encrusts the outer portion of the vug). Specimen was found in the El Sharana mine, South Alligator Valley, Northern Territory, Australia.

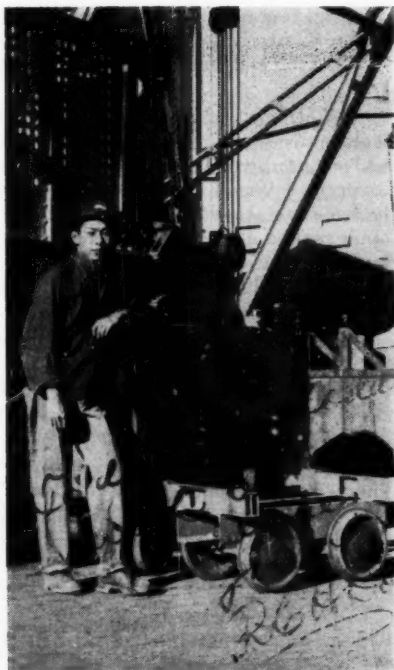
Phosphuranylite: deep lemon-yellow encrustation on reddish-brown feldspar. Locality is the A.B.C. prospect, 14 miles northeast of Katherine, Northern Territory, Australia.

Rutherfordine: brown and yellowish-brown ochre resulting from the alteration of uraninite. From the El Sharana mine, South Alligator Valley, Northern Territory, Australia.

CANADA—"Enclosed you will find two specimens that I found on one of my recent trips to Canada. The green (massive calcite) comes from a road cut



Looking towards No. 2 shaft, North Mine, Broken Hill, N.S.W., Australia.
The new No. 3 shaft is in the background.



R.C.H. Doo. Photo taken at Broken Hill, N.S.W., one of his favorite collecting areas.

around Madoc, Ontario. The black crystal (nice $1\frac{1}{2}$ " long hornblende) is from a road cut just outside Bancroft, Ont., heading north; it occurs with apatite and calcite."—letter dated Oct. 14, 1957, from Walter P. Bulkley, 15 Satellite Lane, Levittown, N.Y.

"I spent a very interesting summer with the American Metal Company in Canada. I was working N.E. of Val d'Or, Quebec, for about a month and then was sent out to La Ronge, Sask., for the rest of the summer. While in La Ronge I visited most of the old showings as far north as the 57th parallel. Most of these were massive pyrrhotite with associated chalcopyrite, arsenopyrite and in some places nickel minerals. I also visited several uranium showings which have been proved to be too small to be of economic importance. Be-

sides specimens of these sulfides I obtained some fair specimens of amphiboles and pyroxenes.

"Since I am now a senior here at Mich. Tech., I was quite busy this fall and didn't get much of a chance to go collecting. Another senior, Walter Ehsam, and I did collect quite a lot of copper arsenides including one piece of solid arsenide which weighs 132 lbs. I do not know what we will do with this monster—it is too big for my collection.

"We have started a chapter of Sigma Gamma Epsilon, the national honorary earth science fraternity here at Tech. and I was very pleased to be chosen the first president.

"Well, I have a batch of thin sections to grind so will sign off."—letter dated Nov. 30, 1957, from A. William Laughlin, Room 108, D.H.H., Houghton, Mich.

ETHIOPIA—Jim Neal, 12 New St., Mt. Joy, Penn., sent in for our examination a nice gray, botryoidal chalcedony.

"This specimen comes from near Batue, located in the Mendebo Mts. Batue is near Goba, south central part of Ethiopia."—on label.

INDIA—Jim Neal, 12 New St., Mt. Joy, Penn., donated a nice specimen—a dark red mass of hematite.

"From Kistwar, India. A G.I. who was flying the Hump into Burma brought this back."—on label.

JORDAN—A reddish banded sandstone (mostly reddish but thin white bands also present) was sent us by L. O. MacMurdy when he was stationed in Lebanon (he is now in the Philippines).

"A sample of typical sandstone from the ancient city of Petra, Jordan (Ref. *Nat. Geog. Magazine*, Dec. 1955, p. 853)."—on label.

LEBANON—"High in the mountains of northern Lebanon are the few remaining 'Cedars of Lebanon.'

"There is a moderate amount of iron ore mined in various parts of the Lebanese mountains. Most of this ore is exported to Europe for smelting and pro-

essing. I am sending you several specimens taken from a mine near the 'Cedars'.—letter dated June 25, 1957, from L. O. MacMurdy when he was stationed in Lebanon (he is now in the Philippines).

Brown masses of limonite (some show slickenside surfaces) and lustrous black botryoidal turgite crusts on brown limonite were the specimens received from Mr. MacMurdy.

SCOTLAND—In the Jan.-Feb. 1958 R&M (p. 34) Sandy Ramsay, in his article "Collecting in Scotland in 1957" writes:

"We moved up to Inverness and then wended our way down Loch Garve, here near the north end of the Loch (Lake) just by the roadside is a big

boulder of smoky quartz, with almandine garnets and small books of mica."

A sample from the boulder was sent by Sandy Ramsay, 1015 Aikenhead Road, Kings Park, Glasgow S4, Scotland. It consists of small, gemmy pinkish almandine (almandite) xls, smoky quartz, silvery-white muscovite books, and whitish albite.

"From a big boulder by the side of Loch Garve, Inverness-shire, Scotland." on label.

SPAIN—Juan Montal, Plaza Sgdo. Corazon 1, Villafranca del Panades, Spain, sent in an interesting specimen—tiny, deep purple azurite xls in cavities of a ferruginous drusy quartz.

"From Papiol, Barcelona Province, Spain."—on label.

Australian Opals are getting scarce!

Editor R&M:

I have just returned from an absence of three months from a visit to New Zealand and Australia. I was greatly surprised at the scarcity of New Zealand green stone and Australian opal. Good specimens are difficult to find and when encountered are very high in price.

The dealers told me that very little opal was coming in because so very few men go into the fields to mine opal. The men find it more lucrative to work at a steady job in the cities, thereby avoiding the uncertainty of finding opal, also the rough life and terrific heat.

So take another look at the Australian opal specimens in your collection and appraise them upwards.

Sept. 3, 1957

Adolph G. E. Hanke
P.O. Box GG
Carmel, Calif.

Mineral Hall of Fame!

Editor R&M:

Enclosed are \$3.00 to be placed in the Frank Duncan Fund.

Too bad there is not a Mineral Hall of Fame so persons such as Mr. Duncan could be placed there.

Good luck to Mr. Duncan, also to R&M for the future.

G. H. Sherrill
704 1st St., N.W.
Watertown, S.D.

Oct. 23, 1957

Will cut up at an early age!

Editor R&M:

Enclosed are \$3 for one-year subscription to R&M for my son, Michael.

He was eight years old last October and is getting a cutting and polishing outfit for his birthday.

John Mazurek
37 Preston Ave.
Ridgefield Park, N.J.

Dec. 18, 1957

FRANK DUNCAN FUND

In the Sept-Oct and Nov-Dec 1957 issues of R&M, there appeared articles relating to Frank Duncan Fund. (Mr. Duncan is an aged mineral dealer who is up against it financially). We had hopes of raising \$500 to be sent him as a nice Christmas present.

Only \$185.10 were raised and this was sent him, Dec. 16th—not as a gift but as a loan (at his request).

Since then \$13.00 more has been received, as follows:

Francis D. Emery, Old Orchard Beach, Me.	\$5.00
Roy M. Fitts, Yarmouth, Me.	2.00
Fran Schiller, Luke, Md.	2.00
Mrs. John J. Tamburri, Morganville, N. J.	2.00
Robert Wilken, Red Hook, N. Y.	2.00

Total \$13.00

We will hold the Fund open for a few weeks in the hope that more contributions may be received.



THE SAND COLLECTOR

CONDUCTED BY PETER ZODAC
PEEKSKILL, N. Y.

Beach sand from Redondo Beach, Calif.

Mrs. Francis Delaney, 37 Cliff St., Yonkers 2, N.Y., donated this sample some few months ago. It is a grayish, medium grained sand consisting chiefly of quartz (colorless, smoky, brownish, reddish, red and gray chalcedony), green epidote, white and gray feldspars, black lustrous hornblende, and black lustrous magnetite.

"From Redondo Beach (Los Angeles Co.), Calif."—on label, Redondo Beach, on the Pacific Ocean, is one of California's most popular beach resorts.

Zircon sand from Piney Island, Del.

From Piney Island in Rehoboth Bay, Sussex Co., Del., we have a sand sample that was collected for us by Mr. and Mrs. Bob Reynolds, RD 2, 470 Stocksedale Road, Glenarm, Md. The sample is a fine grained, black sand composed chiefly of black ilmenite with smaller amounts of colorless to smoky quartz, black lustrous magnetite and a tiny amount of pinkish garnet. There is quite an amount of colorless zircon that fl. yellow.

"Here are some statistics on Piney Island, Rehoboth Bay, Del. It is 1½ acres of wasteland 2 miles from the western shore of Rehoboth Bay. It is covered with weatherbeaten scrub black gum, wild cherry and kink bushes, surrounded by marsh grasses and narrow strips of sandy beach. Our sand sample came from the SE shore."—letter dated Sept. 18, 1957, from the Reynolds.

Epidote sand from Clayton, Idaho

Manuel T. Lee, 496 Morris Ave., Boonton, N.J., sent in this sample which is a fine grained, dark green sand consisting chiefly of dark green epidote (some gemmy, some in xls), with minor amounts of lustrous black magnetite and smoky quartz.

"Panned from the gravel of a small stream near Clayton (Custer Co.), Idaho."—on label.

Concretion sand from Lovilia, Iowa

Leonard Sickler, Rt. 2, Lovilia, Iowa, sent in an interesting sample—a sand concretion (consisting entirely of smoky quartz whose grains were cemented together forming a rounded mass). The concretion was broken in two equal parts—some of the sand from the interior fell out and was collected—this is a fine grained grayish sand consisting entirely of smoky quartz (some stained brown, however).

"From a road cut 3 miles north of Lovilia (Monroe Co.), Iowa."—on label.

See World News, this issue (under Iowa).

Building sand from Marysville, Kans.

On July 2, 1952, the conductor of this department made a stop in Marysville (Marshall Co.), Kans., to visit the Hall Bros. gravel and sand pit on the western outskirts of the town. (See R&M, Nov.-Dec. 1953, p. 569). A sand sample was collected which is very coarse and gray colored, consisting

chiefly of quartz (smoky, milky, brownish and a tiny amount of beautifully clear little rock xls). Pink to white feldspar also present.

River sand from Kansas City, Mo.

Some few months ago we received an interesting sand sample from a good friend of R&M, Mrs. John McCarty, 5824 E. 12th St., Kansas City 3, Mo. The sample was dredged from the center of Missouri River at A.S.B. bridge, Kansas City (Jackson Co.), Mo. The sample is a coarse grained, brownish sand consisting chiefly of quartz (smoky, colorless, brownish, reddish, gray and reddish chaledony) with colorless to reddish feldspar, and a small amount of brownish limonite, black magnetite and one grain of black anthracite coal.

Quartz sand from Callaway, Nebr.

This is a gray sand and so finely grained it resembles flour in appearance—it is all colorless quartz. Donated by Mrs. Robert Cook, Callaway, Nebr.

"This sand is pure quartz (silica) commercially mined here at Callaway (Custer Co.), Nebr. Used in commercial household cleansers."—on label.

Beach sand from Beach Haven, N. J.

Beach Haven is on the S.E. coast of Long Beach Island in Ocean Co., N.J. From the beach we have a sand sample that was collected by Mrs. Frank Walsh, c/o Mr. J. Bell, 67 Galbraith Drive, Princeton, N.J.

The sample is a fine grained, gray sand consisting entirely of colorless quartz.

"Sand from Beach Haven, Long Beach Island, Ocean County, New Jersey (Atlantic side of island)."—on label.

Brook sand from Peekskill, N. Y.

James and Winnie Bourne (of R&M) live on Valley View Road near the Pumphouse, on the northern limits of Peekskill (Westchester Co.), N.Y. The Peekskill Hollow Brook (the main water supply of Peekskill) flows past their

home, about 200 feet to the west. About ½ mile south of their home is a little "beach" and a sample was collected and examined with much interest.

The sample is a medium grained, gray sand consisting chiefly of quartz (colorless, smoky) with smaller amounts of black biotite and pinkish microcline. A tiny amount of black magnetite also present.

Hematite sand from Spearfish, S. D.

From Spearfish, Lawrence Co., S.D., we have a fine grained, reddish sand which consists entirely of soft, earthy, reddish hematite.

Sample sent in by Mrs. Ed. P. Olson, Box 425, Beresford, S.D.

Cave sand from Skyline Caverns, Va.

"Under separate cover I am mailing you a sample of sand and a sand concretion which were removed from the depths of Virginia's famous Skyline Caverns, 200 feet below the surface. We found this material in a varved clay, which fills one of the passages we are working to develop. No doubt you have heard of our famous anthodites, a crystalline formation for which Skyline Caverns are very famous. At present we are working to develop another room of this formation to add to our present existing tour. I would appreciate it very much if you would send me a list of contents of this sand.

"I have been reading R&M for a number of years and have recommended it to many people who are interested in collecting rocks, minerals, etc.

"Enclosed you will find a seasonal pass and we hope you will have the opportunity to use it in the very near future."—letter dated Nov. 28, 1957, from Carlos D. Wine, Resident Manager of Skyline Caverns, Front Royal, Va.

The sand sample is medium grained and brown in color consisting chiefly of quartz (chiefly gray chaledony, some white, red and brown quartz), reddish feldspar, brown clay, and a tiny amount of black to dark brownish magnetite (the brown color due to clay staining).

The sand concretion is round (marble shaped), brown in color and 1 inch in diameter. Sand adhering to the concretion is chiefly quartz (chiefly gray chalcedony, some red, white and brown quartz) and reddish feldspar. The cementing material of the concretion is calcium carbonate.

Skyline Caverns have been a subscriber of R&M for a number of years. We are grateful for their warm interest in R&M, for the samples sent us, and for the pass which we hope to use before the year is out. From all reports and combined with the illustrated literature sent us, Skyline Caverns is a most fascinating phenomena of nature and we recommend it to all our readers. Front Royal is in the eastern part of Warren Co., in northern Virginia.

Limestone sand from Lebanon

Some few months ago L. O. MacMurdy, a good subscriber of R&M, was stationed in Lebanon, a small republic bordering on the eastern Mediterranean and while there he collected for us a large amount of most interesting sands and minerals. One of the sands was collected from the bottom of King Solomon's Well. (Mr. MacMurdy is now stationed in the Philippines).

The sand from the well is dark gray in color and very coarse grained. It consists chiefly of limestone (gray to brown in color) with small amounts of gray chalcedony and a tiny amount of dull black magnetite; a considerable amount of black sea shells also present.

"In southern Lebanon, between Tyre and Israel, about 300 yards from the sea, is King Solomon's Well. A natural spring still used to irrigate the farmlands of fruits, bananas, and vegetables on the narrow coastal plain. This spring has been flowing since Biblical times. The sand sent you from this spring was taken at its point of discharge.

"Sand from the bottom of King Solomon's Well (Spring), south of Tyre, Lebanon."—on label.

Beach sand from Mt. Maunganui Beach, New Zealand

Bay of Plenty, a huge body of water, indents the north coast of North Island of New Zealand. From the beaches on Bay of Plenty we have two sand samples that were collected for us by Miss Winifred H. Arnold, 2020 Magnolia Ave., Long Beach 6, Calif.

One sample comes from Mt. Maunganui Beach. This is a medium grained, gray sand consisting chiefly of lustrous colorless quartz and sea shells (white, some brown also pinkish) and a small amount of black magnetite.

"Mt. Maunganui Beach, Bay of Plenty, (ocean side), New Zealand, 1952."—on label.

The other sample comes from Mt. Maunganui, Tauranga Harbor side. This is a medium grained, gray sand consisting chiefly of lustrous colorless quartz and sea shells (brown, white).

"Mt. Maunganui, Tauranga Harbor side, Bay of Plenty, New Zealand, 1952."—on label.

"Mt. Maunganui (meaning big mountain) stands at the end of a narrow point of land that forms one side of Tauranga Harbor. This is a popular holiday resort, having both ocean and harbor beaches, and is the finest bathing beach in the Bay of Plenty."—note sent in with the sand samples.

Beach sand from Kilmun, Scotland

Here is a sand sample with an interesting legend that was sent us by Sandy Ramsay, 1015 Aikenhead Rd., Kings Park, Glasgow S4, Scotland. The sand comes from Holy Loch (Holy Lake), a small though beautiful inlet of the sea (Firth of Clyde) about 2½ miles in length, surrounded by hills of considerable height. On its north shore is Kilmun.

The sample is a dark gray, coarse sand consisting chiefly of quartz (colorless, smoky), pink feldspar, red hematite, brown limonite, black magnetite, colorless muscovite, green serpentine, black bituminous coal and sea shells

(blue, white). Here is what its label reads:

"Beach sand. Kilmun, Holy Loch, Firth of Clyde (Argylshire), Scotland.

"According to legend, when St. Mungo (or St. Munn) decided to build a cathedral on the banks of the Molibdar burn, he sent a ship to the Holy Land to bring back a cargo of sand to be used in the mortar necessary for the building of the cathedral. The vessel, however, was wrecked in the Holy Loch, almost at the end of its journey, but a small quantity of the sand was saved and used to build a church at this spot (Kilmun).

"Nowhere else on the shores of the Holy Loch can real sand be found and this, supposedly, has been washed from the wreck.

"Sand collected and given to me by my friend, Hugh McCallum of Barrhead."

Collector's Corner

For the special benefit of collectors who may be living in areas far removed from other collectors we have opened this feature. In this corner, a collector may have his name and address listed for the purpose that other collectors may write him in the hope that through correspondence, exchange of ideas and specimens, new friendships may be formed. Listings are free.

Dwight Weber, 547 W. Mendocino St.,
Altadena, Calif.

Marjorie H. Nichols, 106 Grove St.,
Putnam, Conn.

Mrs. Bertha Lawrence,
1137 N.W. 58 Terrace, Miami, Fla.

A/1c Ralph Wayman, 3554 C.C.J. (Supp).
Box 130, Moody AFB, Voldosta, Ga.

Dave Strief, 3217 John Lynde Road,
Des Moines 12, Iowa

Mrs. Walter J. Broderson, 657 McLean Blvd.
N.W., Wichita 12, Kans.

Harold P. Trefethen, 98 Allen Ave.,
Waban, Mass.

Walter Kalata, 100 Shamrock St.,
Ironwood, Mich.

Forrest Shouldice, 229 W. Ayer St.,
Ironwood, Mich.

Michael F. Kidzus, 23 Ravine Drive,
Matawan, N.J.

Richard C. Haefner, 217 Nevin St.,
Lancaster, Pa.

Bob Snyder, 1916 Rudy Road,
Harrisburg, Pa.

John Speer, 1605 College Ave.,
Anderson, S.C.

C. A. Hull, Box 30, Keystone Route,
Rapid City, S.D.

Charles Speltz, 1917 Foster,
Memphis 14, Tenn.

Harry Hollingsworth, 901 Country Club Rd.,
Borger, Texas

J. E. Rawles & Jimmie, 51 Green Acres Rd.,
Newport News, Va.

Sallie Ann Potts (14 years), P.O. Box 283,
Parkersburg, W. Va.

John Potts II (12 years), P.O. Box 283,
Parkersburg, W. Va.

Linda McCoy (14 years), 823 28th St.,
Vienna, W. Va.

Elizabeth Gibbs (16 years),
854 Fairview Ave., Parkersburg, W. Va.

John W. Dryden, Star Route,
Palmer, Alaska.

Fred Samuels, Dragones 108,
Havana, Cuba



WOMEN'S CORNER OF R&M

Conducted by Winnie Bourne

c/o Rocks and Minerals

Box 29, Peekskill, N. Y.

A few hints on collecting

Dear Winnie:

I just finished reading your column in the Nov.-Dec. issue of R&M.

I have been interested in rock collecting for several years and wish to add a few suggestions to your advice on mineral collecting.

Always take along a first-aid kit which consists of a roll of adhesive tape, bandages, some preventive for poisonous snakes, insects, etc. Take along also a candy bar or two to pep you up when you become tired. An ordinary car jack comes in mighty handy when you want to turn over a large boulder.

When you reach home with your minerals, wash them well to remove all loose dirt and, when thoroughly dry, give them a thin coat of clear shellac (spray bottle gives best results). A coat of this shellac will preserve the beauty of minerals and give the dull ones a bright shiny luster.

If any readers of R&M have a chance to visit Spruce Pine or Plumtree, N.C., the land of my birth, you will find there more different minerals than in any other section of the U.S.

Do hope these simple hints will help new rockhounds—speaking of myself, I had to learn the hard way.

My 13-year-old daughter is so interested in minerals that she is planning a career in them.

Best wishes.

Mrs. Ruth Stanley
Box 34
Thurmond, N.C.

Has charge of Heidelberg Museum

Dear Winnie:

I enjoy reading R&M very much. I

like the addition of your column with a place for women's letters and her articles.

I am enclosing a leaflet which tells about the Jones Collection of Minerals at Heidelberg College. Since the son of the donor left to retire and live with his son, I have been in charge to show visitors the museum on Friday afternoons, except college vacation periods.

Please add my name and the Museum's to the Visiting Rockhounds Welcome column. We are usually gone at Christmas and Easter vacations.

The museum collection was a gift of the late Charles H. Jones of East Orange, N.J., and came into the possession of Heidelberg College in 1920. A number and index file for locating and identifying specimens in the collection lists more than 1,000 of the species classified by Dana, and approximately 4,200 specimens on display, including many rare ones. Two special exhibits of gems and semi-precious stones, and a small display of fluorescent minerals are to be viewed.

For the past year and a half I have enjoyed instructing visiting children's groups through talks on the local rocks and minerals, through games they play while visiting, and through writing a guide sheet for use with older groups. A big project has been the writing of material for signs giving spot minerals from each case with the chemical formula and composition. They will be of help in student study and to visitors. I learned so much doing it, too!

Best wishes.

Mrs. Joy Hintz
Heidelberg College
Tiffin, Ohio

Loves the Women's Corner

Dear Winnie:

I am always eagerly awaiting the new issues of R&M. The magazine has so many outstanding features that it is hard to say which one I like best. The World News on Mineral Occurrences is probably the one I like best, but—I like the Women's Corner a lot, too.

One of these days, Winnie, I shall write you in more detail because I love your Corner, and here in the West women are so very active in the mineral field, in running clubs, etc., that we all appreciate having a little Corner where we can "squawk" if we want to.

Mrs. Wm. J. Robertson
10334 Ilona Ave.
Los Angeles 64, Calif.

AMERICAN FEDERATION OF MINERALOGICAL SOCIETIES

1958 JUNIOR ESSAY CONTEST

- 1—Any boy or girl, 16 years of age or under as of May 1st, 1958, is eligible to compete.
- 2—Each essay shall be entirely the work of the person entering same.
- 3—The subject of the essay shall be: "WHY I SHOULD BE A MEMBER OF A MINERAL AND/OR GEM SOCIETY," and shall be of not more than 2000 words.
- 4—PRIZES will be awarded at the 1958 convention of the American Federation, at Dallas, Texas, May 1st through 4th and will be a \$50.00 U.S. Savings bond for 1st place and a \$25.00 bond for 2nd place.
- 5—Deadline for mailing entries will be midnight, March 31st, 1958.
- 6—All entries are to be addressed:
Henry B. Graves, Contest Chm.,
3153 N.W. 27th Street,
Miami 42, Florida.
- 7—All manuscripts submitted will become the property of the American Federation of Mineralogical Societies, to be used in any manner they may see fit.
- 8—The decision of the judges shall be final.

Midwest Federation of Mineralogical and Geological Societies' Convention

Verne I. Montgomery, general chairman of the Midwest Federation Convention, Gem and Mineral Show, and Harry C. Witmer, Society Exhibits chairman, have released the classifications and rules governing the competitive exhibition which will be held at the Community High School, Downers Grove, Illinois, on June 19th to 22nd, 1958.

The show will be open to the public from 1:00 P.M. to 10:00 P.M. on Thursday, 10:00 to 10:00 on Friday and Saturday, and from 1:00 P.M. to 6:00 on Sunday. The halls will be open a day before and a day after the convention for setting up and removing exhibits.

Besides the 33 classifications in which first, second and third-place ribbons can be awarded, there will be trophies for the best club exhibit, best individual, best junior club and best of show.

Among the special exhibits, which will feature those that are novel, educational or demonstrational, there will be some most unusual ones, shown for the first time at a large convention.

Good space has been reserved for as many as 30 commercial exhibits, enough to provide for a wide range of interests.

Further information can be obtained by writing to the following chairmen:

Competitive Exhibits—Harry C. Witmer,
5303 Victor Street, Downers Grove, Ill.
Special Exhibits—Mrs. Stella Barrick,
5500 Main Street, Downers Grove, Ill.
Commercial Exhibits—George Malott,
Rte. 2, 35th Street, Hinsdale, Ill.

THE MICRO-MOUNTER

Conducted by Neal Yedlin—129 Englewood Drive, New Haven, Conn.

Jim Palmer, of 646 Humboldt St., Reno, Nevada, has been collecting for some time in the Majuba Hill, Nevada area. This locality, and the Yerington district mines in the same state have provided some of the finest specimens for m/m collectors. Some years ago Jack Parnau of Stockton, California supplied us with a marvelous assortment of the minerals from these mines. Palmer recently furnished some that were added to our collection. Here is what he has to say:

"I should like to report on a locality that is certainly much better known to collectors nationally than it is known to local collectors—in fact it took a collector from Baltimore, Maryland to arouse my interest. The locality is the Myler Mine at Majuba Hill located in the N.W. corner of R.32E, T32N as shown on USGS maps, and is approximately 20 miles west of Imlay in Pershing County, and may be reached by an excellent and well maintained road from Imlay. The Myler Mine, which is situated at about 6000 feet in the Antelope Range, is notable in that it has produced in addition to Copper, some Uranium and some Tin, the latter being a rarity commercially in the U.S. Of particular interest to collectors are the well-crystallized species of rare minerals, and I know of no other locality with the possible exception of Ludwig near Yerington that offers so much to the mineral collector. Many of the minerals are suitable for micro-mounts and there are many colorful hand-sized specimens also. I am listing below those that I have observed from this locality, most of which are represented in my own collection:

"Scorodite: an arsenate of iron and aluminum in excellent, prismatic, green xls.

Metazeunerite: an arsenate of copper and uranium, in fine tabular green xls.

Quartz: of poor quality and small. Not worth the collecting, but in xls.

Tourmaline: as tiny brown to black needles associated with the above quartz crystals.

Torbernite: a phosphate of copper and uranium, in fine tabular green xls. Some fine hand-sized specimens have come from there.

Cassiterite: a tin dioxide in small, honey-yellow xls, good specimens for the locality. Associated with magnetite, etc.

Clinoclase: a copper arsenate in really superb, deep blue xls. The quality of the above is particularly fine and worth the trip alone. Rare.

Azurite: a copper carbonate in deep-blue xls. Some will make attractive hand specimens but generally poor micro-mounts.

Malachite: another copper carbonate in fine green tufts and rosettes. No malachite xls have been observed thus far.

Brochantite: a copper sulphate in excellent, prismatic clear green xls.

Magnetite: an iron oxide in unattractive specimens as grains associated with cassiterite.

Olivenite: a copper arsenate in superb green prismatic xls.

Leucochalcite: a hydrated arsenate of copper, present as greenish-white, silky needle-like xls. This is an alteration product of olivenite and is rare.

Chalcanthite: a copper sulphate of poor quality. Found only in the tunnels. Unfortunately this mineral disintegrates on exposure to air.

Chrysocolla: a copper silicate in bluish-green masses. This is true Chrysocolla and is much too soft for cutting.

Arsenopyrite: an arsenide of iron as poorly developed, small silver-white xls.

Cuprite: a copper oxide, sparingly found in blood-red cubic xls.

Cornwallite: a copper arsenate and a rare mineral. Emerald green globules.

Pharmacosiderite: an iron arsenate in perfect, clear cubic green xls.

Cyanotrichite: a sulfate of copper and aluminum. As wool-like aggregates of minute blue hairlike xls. A rare mineral.

Chalcophyllite: a sulfate arsenate of copper and aluminum in bluish-green platy xls.

Spangolite: a sulfate of copper and aluminum in fine blue xls. Outstanding specimens of a rare mineral. I have seen really superb specimens from this locality.

Tyrolite: an arsenate of copper and calcium. In light green scales and of no use to the collector of hand-size specimens. In fact this mineral is so rare and sparingly present that it is doubtful that additional will be found.

Goethite: an iron oxide. Blackish-brown massive and unattractive.

"There are many additional minerals from Majuba Hill, some of which I have not seen and some that have not been positively identified. In an effort to secure as many as possible I should appreciate hearing from anyone who can add to the above list."

If you have such information send it to us as well as to Jim Palmer. We'd like to publish it for the record.

More from Baltimore. This active club has assembled a loan collection of 2 x 2 kodachrome slides of micro-mount minerals and techniques, some done in Baltimore, some by Perloff, and some by us. The slides are available to schools, mineral clubs and the like. No charge except shipping costs. Write to the Baltimore Mineral Society, c/o Maryland Academy of Sciences, 400 Cathedral Street, Baltimore, Md. Another fine service to amateur mineralogy by the members of this club.

Some recent additions to our personal collection. We list them to advise m/m collectors that these unusual minerals are available. The sources are dealers, other collectors, exchanges with schools

and museums. Watch the dealers ads carefully and try to visualize the specimens described. Some price lists will indicate whether a specimen is suitable for micro work. When you see a description of a specimen 'minute xls lining cavity in matrix' you know it has possibilities. Anyway, here they are:

Kasolite, *curite*, *dewindtite*, *torbernite*, *sklodowskite*, from the Belgian Congo.

Phosgenite—Laurium, Greece

Andorite, *stannite*—Oruro, Bolivia

Clinoclasite—Japan

Larsenite, *prehnite*, *ganophyllite*
—Franklin, N. J.

Phillipsite, *heulandite*, *analcite*
—Washington State

Ramsdellite—Lake Valley, N. Mexico

Stephanite, *pyrargyrite*
—Chihuahua, Mexico

Apatite and *epidote*
—Untersulzbachtal, Austria

Pseudobrookite—Thomas Range, Utah

Pseudomalachite, *olivinite*
—Yerington, Nevada

This is being written on January 15th, 1958. Yesterday we received a specimen of strengite from Georgia. (Locality—old iron pit, 3½ miles west of Etna, Georgia) See ROCKS AND MINERALS, Jan.-Feb., 1958, News on Mineral Occurrences, Georgia. The like of this strengite we have never seen before. On a tough quartzite matrix, seamed and pitted, the strengite occurs in the vugs as clear pink singles, and as clusters of radiating prismatic xls, magnificently formed, sharp and lustrous. Associated are random tufts of cacoxenite, pale yellow, not in itself spectacular, but adding to the superb whole. The quartzite, while tough, has no cleavage or parting, and can be controlled in breaking. And the strengite xls really stick to the matrix. Jarring doesn't "pop" them free.

This is an auspicious start for us for the new year. To paraphrase a Detroit, Mich. advertising blurb—"Our First in Fifty-Eight".

AN EXPERIMENT IN MINERAL SYMPOSIA

A signal event in the history of micro mineralogy

Micro-mounters have always been few in number. Rarely have more than a handful of local enthusiasts gathered together to pursue their interest. On September 14, 1957, under the sponsorship of the Baltimore Mineral Society, the first nation-wide micro-mount symposium was held at Towson, Maryland. Fifty-three collectors from nine states and the District of Columbia attended. Never in history have so many micro-mounters gathered under one roof.

There was considerable initial hesitancy about so ambitious an undertaking. Preparation began six months before the symposium. Shortly thereafter enough enthusiasm was aroused to indicate this could be a highly successful occasion. The program was placed in the able hands of Arthur Goodwin and Paul Desautels. Their initial ideas became the final program. Time was proportioned for lectures, demonstrations, workshops, exhibits, and sales. An ad was run in *ROCKS AND MINERALS* magazine and announcements went to all known micro collectors. Publicity was prepared and sent to the National Federation show.

At 10 a.m. cars bearing license plates from many states converged on the newly opened Cook Library on the campus of the Towson State Teachers College. After registration, the guests were welcomed in the Forum by Paul E. Desautels, at which time the objectives of the symposium were explained.

The highlight of the morning meeting was the first showing of the Baltimore Mineral Society's colored slide program. This series of slides covering the history and techniques of micro-mounting was prepared by the Society as an educational device. It was designed to be made available on a loan basis to other interested responsible mineral societies.

The equipment and tools described in the slide program were placed on exhibition following the morning intro-

ductory meeting. Also on exhibit were a number of micro-mounts from the George L. English Collection. Concurrent with the exhibits, micro material submitted by several mineral dealers was placed on sale. A large number of microscopes were available and consequently intelligent purchasing was made evident.

After a campus lunch, the first of two workshops was scheduled. The workshops were completely informal and were designed for active participation by both novice and expert. Advanced collectors from different areas displayed a keen interest in an interchange of techniques and were generous with time and material in demonstrating basic techniques to the novice. The number of microscopes in use simultaneously was impressive as were the number of lights, some ingeniously designed, as well as at least two brilliantly designed home-made rock crushers. To insure the success of the workshops, members of the Baltimore Society had made available a quantity of surplus material. It was gratifying to note some generous contributions by many visitors.

The first guest speaker, Miss Mary Mrose of the United States Geological Survey, delivered an illustrated talk on "Micro-Phosphates of New England". Miss Mrose was equipped with a table, a single specimen, and a vast knowledge of New England phosphates. Miss Mrose promised that this was to be her last talk on New England phosphates. At the conclusion of her thrilling talk, it was obvious to all present that her "promise" was in fact a threat. In true mystery style, Miss Mrose elaborated on the sleuthing, tribulations, and triumphs in identifying a new phosphate. She emphasized the fertility of the New England pegmatites as a source of micro specimens and indicated that at least six phosphates were first discovered in this area. The most recently discovered and at present probably the rarest of

all minerals, Yedlinite, represented the one specimen displayed by Miss Mrose.

Miss Mrose's talk was followed by a panel and discussion covering sources of micro material, literature available for micro-mounters use, and prominent micro localities.

The evening guest speaker, Mr. Lou Perloff, delivered an illustrated talk on "Micro Uranium Minerals". Mr. Perloff accompanied his talk with a large number of superb colored slides taken from his own collection. His talk pointed out the inadequacy of such words as "yellow" and "red" in describing the colors of micro uranium minerals. Included in Mr. Perloff's slides was a photograph of torbernite crystals from England which persisted in retaining brilliant green color contrary to the normal fading behavior observed in this species. A high note in aesthetic symbolism, was one of Mr. Perloff's photographs of tyuyumunite bearing an unmistakable resemblance to the profile of the late Albert Einstein.

The final functions of the program were the judging of competition and the evening workshop. The judging was performed by Paul Desautels, Harold Levey, Neal Yedlin, and Lou Perloff. Probably for the first time in micro-mount competition, judging was performed on a numerical objective basis. The entries were scored on the following basis:

1. Quality of material 40
2. Unusual nature of material . . . 30
3. Treatment of material 15
4. Overall appearance of specimen and container 15

The judges were impressed with the superiority of the mounts of the advanced collectors and the excellence of the mounts prepared by the relative novices.

This experimental symposium revealed the following important points:

1. That it is practicable and desirable to hold the meetings limited to the field of micro mineralogy.
2. That the duration of future programs be increased from one to two days.

3. That the workshop periods proved invaluable in offering an opportunity to meet and work with fellow micro-mounters.
4. Competition can be evaluated objectively and numerically.
5. That a meeting of this nature can be conducted with a limited expenditure on the part of the host society.
6. That such a meeting be held annually.
7. That micro-mounters are most generous in sharing their material.
8. That the collections of micro-mounters today have far superseded the quality of the pioneers.

The Baltimore Mineral Society, gratified with the results of this symposium and more than willing to hold a similar event again, would like to encourage another alert group to assume the role of host at the next national gathering.

A. Goodwin, H. Green,
C. Smith & H. Levey

Diamond Mine Owner Dies, One of World's Richest Men

LONDON (AP)—Dr. John T. Williamson, reputed to be one of the world's wealthiest bachelors, died Tuesday night, Jan. 7, 1958, in his lonely jungle skirted home in Tanganyika, Africa. He was 50.

He was a shy, unassuming Canadian geologist who used a brilliant scientific brain to find 100 million dollars worth of diamonds under the clay of an East African plateau.

His London agents said he died at his six-square mile diamond claim at Mwadui, Tanganyika, the richest privately owned mine in the world.

Armed with his geology degree from McGill University in Montreal, Williamson went to Rhodesia in 1934. He spent the next six years prospecting in parts of Africa seldom visited by white men. He was so poor that he often could not pay the natives who helped him.

But in 1940 his persistence paid off. Discovery of the Mwadui mine in Tanganyika made him a millionaire almost overnight. He kept his first find, \$84,000 worth of diamonds, in a bottle.

The Canadian lived in a simple home at his mine, which was guarded by native sentries.

THE AMATEUR LAPIDARY

Conducted by Captain George W. Owens

Hq. Sq. 384th Bombardment Wing, Little Rock Air Force Base, Jacksonville, Arkansas

Amateur and professional lapidaries are cordially invited to submit contributions and so make this department of interest to all

Notes on Several Gem Stones

Some of our lesser-known gems have most interesting "backgrounds" and make excellent conversational items at any gathering of the faceting or cutting clans. A few of us have cut and polished everything from the original 7-Up bottle to pieces of the breccia remaining from the first atom bomb explosion; yet the great majority of us amateurs stick to the tried and true commercial types of stones. It is to these fine people that this article is written in an attempt to generate their interest in *any* type of mineral that may have cutting possibilities.

It is not necessary for us to have fine crystals to consider faceting or cabing a specimen. Often it is impossible to obtain a XL of sufficient size to cut, yet daily we cut hundreds of cabochons from materials that seldom or never occur as crystals.

Every person that has ever cut a stone has probably made at least one agate cabochon. Yet how many of us have ever faceted an agate? Some of them are most beautiful when faceted. Almost every stone that is subject to cabochon treatment will facet. Likewise, every stone that will facet is subject to cabochon treatment. This simple fact is one of the most overlooked in our entire hobby. One of the most beautiful and complete collections of cut stones ever to come to the author's attention contained numerous cabochons of what is generally considered "faceting material", and also had many faceted items of materials generally conceded to be only cabochon types. So do not overlook the possibility of enhancing your collection in this manner. In the following list most of us will have at least one specimen. If it is not of clear clean faceting grade,

why not cab it? Some of the materials are rare, others common, yet all have one definite connection. They will cut and polish! How many of them have you tried to cut?

Apatite. Colorless when pure, and rare in this color. Apatite is a fluochlorophosphate of calcium. It occurs in violet, light blue, light red, greens, brown, and a very beautiful yellow. As a rule only the transparent varietites are used as gems yet some opaque material makes odd and interesting cabochons. Moroxite is a name given to a deep green variety but it is just as well to call it an apatite. Due to its hardness of only 5, apatite is too soft to wear well in rings yet makes a most beautiful necklace or ear-wires. The yellow stone showing to excellent advantage when set in silver. Colors of apatite other than the fine yellow found in Durango, Mexico are hard to find and require diligent searching among the stocks of the various mineral dealers for us to locate any at all. Apatite is found in Germany, Norway, Central Europe, Spain, Siberia, Burma, and Ceylon as well as Australia and Mexico. In the United States it is found in Maine (Mt. Apatite) and in San Diego County, California. It is a widely distributed mineral common in crystalline metamorphic rocks. It is subject to all types of fashioning. The emerald cut with extra facets makes a fine stone. Apatite responds to the standard cabochon treatment but has a tendency to "lemon-peel" rather badly on a semi-dry polish wheel. The highest and best polish obtained by the author was on a very wet, slow running hard felt lap that had a minimum of polish on it. Polish was obtained using all of the standard powders: chromium, tin, and cerium oxide. Due to the poisonous effects of tin oxide and the staining

qualities of chromium oxide, it is recommended that only cerium oxide be used. In faceting, a high polish was obtained using a very weak solution of cerium oxide in water on a wax lap. Roughly speaking, about one teaspoon of cerium to one pint of water gave good to excellent results. Diamond compounds or bort was not used in this test. Anyone having data on bort or other polishing media please write me.

Several sets of angles were used with 40 degrees for the mains (Crown) and 39 degrees for the mains (Pav) being found most rewarding is stone appearance. Apatite occurs in XLS from minute size up to giants of several ounces. Practically every mineral dealer has specimens of the Durango, Mexico apatite.

Axinite: A boro silicate of aluminum and calcium with some iron and manganese. Transparent to opaque. Colors: brown, blue, yellow, grey, and violet. Harder than feldspar, softer than quartz. A six and three-quarters is a good average. Very few crystals are large enough or clear enough for faceting but it is sometimes encountered in the commercial jewelry trade. As the name seems to indicate, the crystals are axe blade shaped (tabular and acute edged). Rare in any color, this mineral is lacking in most collections. France and Tasmania has produced some fine crystals as has the state of California. The author's good friend, Mr. George Curnow of Chester, California had some of the finest XLS of axinite from a find he made in northern California. George is an avid collector and owns some specimens any museum would be happy to have. A letter to him might result in your getting an axinite for your collection.

Axinite occurs in cavities in diabase or granite and the contact zones of these rocks. Large crystals in any condition are extremely rare. The step or table cut is generally used although some of the XLS recovered by Mr. Curnow were large enough to yield one to two-carat round brilliants. No particular

problems other than the distinct cleavage, were encountered in cutting this material. It responded to standard cabochon treatment with some extra care being exercised in maintaining as low a friction heat as possible. It seemed to facet much the same as quartz and while an exceedingly high polish was not obtained, it was satisfactory. Angles for quartz were used. Cerium oxide on a plexiglass lap provided the polish. It must be pointed out that an insufficient number of stones were attempted to draw any completely conclusive answers, yet satisfaction was achieved using the foregoing method. Anyone having had experience with this material is requested to contact me.

Benitoite: Titano-silicate of barium, with free titanium oxide. Colorless to purple—through the blues. Found only in San Benito County, California. Rare, but enough material in hands of amateurs to provide a considerable number of stones and specimens. Most cut stones (cab or facet) are under two carats in weight. Largest cut perfect stone is only seven carats. They are to be found in commercial jewelry in a very limited way. Price to amateurs seems excessive but again—insufficient data to make a firm statement. Benitoite occurs in natrolite, with neptunite in a restricted area of the Mt. Diablo range. The choice gem color is a fine light blue which resembles sapphire. To obtain the best appearing gem the table facet should be cut parallel to the crystallographic axis. The usual cut is the brilliant but it will also make a nice cabochon. The benitoite is of special interest to mineral collectors as it is representative of the ditrigonal bipyramidal class in the hexagonal system. These tabular hexagonal crystals have a vitreous to adamantine luster and fashion into interesting stones. 40 degrees for the Crown and 40 degrees for the Pav. main facets gives a nicely appearing stone.

Benitoite is not a difficult stone to facet except for the fact that nearly all rough will be small in size and has the difficulties encountered in any small

stone. Its hardness of only six to a possible $6\frac{1}{2}$ causes it to wear rapidly on the wheel and one must exercise constant control to achieve equal sized facets.

Polish is obtained using cerium oxide on a lucite lap.

Brazilianite: Sodium aluminum phosphate. Yellow color to a poor greenish yellow. Hardness of only $5\frac{1}{2}$. Crystals found in Minas Geras, Brazil in pegmatites. Associated with quartz, feldspar and mica. Interesting only in that it closely approximates yellow beryl when fashioned. To the collector it is a necessary stone but the average silversmith would never have the occasion to use it. As a rule it is fashioned in the emerald cut or the oval brilliant, seldom as a cabochon.

Crown mains 40 degrees. Pav. 39. Polish with Linde A on a tin lap. It does have a plain of perfect cleavage so care should be taken to control heat and shock.

Diopside: Calcium magnesium silicate. With some ferrous iron to which it owes its color. The several types of diopside are all interesting and all are used as gems. Diopside may be classed as a rare stone in any of its types. (Alalite, malacolite, violane)

Alalite is colorless to green.

Malacolite: Pale green to deep green.

Violane: A very rare type of exceedingly beautiful violet blue color.

Sources: Brazil, Italy, Sweden, Siberia and Canada. In the U.S. from Kentucky and New York. The Kentucky material, while small in size, is of excellent color, some almost emerald color. A fine diopside is a welcome addition to any collection and a very definite must for collectors of the rarer items. Incidentally, violane is a massive form and makes beautiful cabochons. The closest appearing material to its color is lapis, with the violane being the more beautiful. It is nearly always cut en cabochon while alalite is faceted. Step cut, brilliant and oval cuts are those most commonly used. It has a poor toughness and care must be exercised when faceting to avoid shock. It also has a perfect basal

cleavage. Polish is not easy. More poorly polished diopsides are probably in amateur hands than any other rare, yet hard to polish stone. Polish of excellent high luster may be obtained by using tin oxide on a wax lap. More than the usual care must be exercised. The author leaves his stones in contact with the lap only half as long as he does for the easy polishing types such as quartz. Great care is used in both the dopping operation and in resetting the stone to the spinning lap. A fine polish can be achieved if care is used. Crown mains at 38 degrees. Pav at 38° . The author is looking for a nice and clear crystal from Kentucky to add to his mineral collection. Any reader having "extras" is requested to write.

Some faceted diopside is extremely difficult to identify when compared with faceted peridot. To be absolutely certain a hardness test is necessary. The greasy luster of most peridot as compared to the highly vitreous luster of diopside helps but is not sufficient to make a positive identification.

Diopase: Hydrous copper silicate. A beautiful emerald green in its best color. From the Congo region of Africa. It is recovered with copper ores and deserves to be termed as rare. Almost always faceted in the emerald cut. Sometimes en cabochon. Five in hardness. This gem requires special handling in fashioning. 42 degrees for the Crown mains, 39 degrees for the Pav. results in a very nice stone. Here again, the author is seeking a nice crystal. In grinding care must be exercised because of the perfect cleavage and poor toughness.

As a rule, never grind on a coarse grit, go directly from dopping the unprepared rough to a very fine grit. A loose 600 grit on a cast iron lap can be used, but 1200 diamond is preferred. Avoid shock and control heating. This stone is one of the most difficult that the author has encountered. Perhaps if more rough were available, a better method of faceting could be determined but fine grit and constant care should yield you a nice gem. Polish is obtained

using cerium oxide on lucite. Probably most stones are cut from massive material but small crystals are available from time to time. A standing order with one of the mineral dealers should bring you results. Do not expect large XLS. A XL of half inch size is exceptionally rare, most are under 3%".

Enstatite: (Hypersthene). A magnesium silicate with iron. Enstatite grades into hypersthene when iron content is in excess of fifteen percent. Colors: white, gray, yellow, green, and recently a fine brown has been discovered. The brown is rare in enstatite but common in hypersthene due to the amount of iron and in some cases, alumina present. The yellowish green is the most common color used for gems. Found in South Africa, Norway, Bavaria, Isle of St. Paul (off the coast of Labrador). In the U. S. in North Carolina, Pennsylvania, Maryland, New York and Arizona.

True cat's eye type enstatite has been found in Arizona; however, it is rare. Most of the enstatite and hypersthene in this category have a peculiar metallic sheen. This is not a true chatoyancy or cymophane effect but for want of a better name will be so termed. This effect is due to its fibrous structure. It is a very pleasing effect and every collection should have at least one representative of each type. Faceted enstatite is sometimes called "green garnet" in the jewelry trade. It is sold commercially, but due to the American market trends, is but seldom seen in the States. It is not uncommon to find it offered for sale in the jewelry shops of Europe. Faceted stones are usually in a step or mixed cut. Due to its darkness of color, hypersthene is generally cut en cabochon. These materials are almost always massives as crystals are rare, but not unknown. Massive chunks of considerable size have been found but gemmy pieces tend to be small in size. Cutting and polishing of cabochons is not a problem. The material needs to be oriented to produce eye stones. Standard cutting procedures work very well and

since hardness is only five, no sanding troubles have been encountered. In faceting Linde A on a leather lap gives a good polish. 39 degrees Crown mains and 39 degrees for the Pav. are recommended. A high polish is possible. An ever higher polish may be obtained by adding a little acid to the polish but the author has not experimented with such a mixture. Oxalic acid might enhance the polish of the heavy iron content stones. In some cases a good enstatite might be confused with chrysoberyl. SG and RI of chrysoberyl are higher than enstatite and should easily separate the two. Every collection should have these materials represented especially since they occur in the U. S.

The short length of each column in **ROCKS AND MINERALS** precludes a complete description of all the many tests that the author makes before writing about any gem stone. In some cases it has been necessary to depart from standard cutting or polishing methods to obtain satisfactory results. At any time any subscriber to our magazine has a problem on cutting or polishing we will do our very best to provide a solution. Please feel free to inquire. If we have the information, it will be shared with you at no cost. As often mentioned, there is considerable room for improving our procedures in practically every phase of our hobby. Any person, either amateur or professional, is most cordially invited to inform our readers of any unusual method they use to obtain beautiful gems. There is a definite need for information on polishing methods for the very soft materials—most soft stones are the bug-a-boos of the amateur cutter. Yet they too can be made into beautiful gems for our collections.

The below five in hardness items offer us a wide range in colors and materials—if only we could always be sure of our cutting and especially our polish techniques in this hardness region! Someday some amateur will supply the information necessary for us to quickly and easily achieve a polish on any material!



Fossil Department

Conducted by Howard V. Hamilton

1340 Crandall Avenue
Salt Lake City 6, Utah



What Fossils Are and How They Are Classified

By William H. Matthews III

Lamar State College of Technology, Beaumont, Texas

Man has probably wondered about fossils much longer than most of us realize. Fossil shells and bones have been found in association with the remains of primitive and prehistoric man, and these early men may have thought that these fossils possessed some supernatural powers. In certain of the primitive tribes living today we find that some of their medicine men include fossils in their "medicine bags."

The early Greek and Roman philosophers were aware of fossils and their similarity to living organisms but were not certain as to their true origin. At least a few of them thought that these represented the remains of ancient plants and animals, and that the seas had once occupied the areas in which these fossils were found. Others attempted to explain them as "freaks of nature" or devices of the devil which had been placed in the rocks to lead men astray.

This early interest in fossils developed into the science of *paleontology*—the science which deals with the life of the geologic past; or more simply, the study of *fossils*. A fossil is the remains or evidence of the presence of ancient plants or animals. Fossils usually represent the hard parts of an organism but may also be indirect evidence in the form of tracks, trails, borings, etc.

REQUIREMENTS FOR FOSSILIZATION

Only a small fraction of the organisms that have lived in the past have left any record of their existence. Numerous factors may determine whether or not an

organism may become fossilized, but the three basic requirements for fossilization are:

1. The organism should possess hard parts, such as shell, bones, or woody tissue. This type of organism is much more likely to be satisfactorily preserved.

2. The organic remains must escape immediate destruction after death in order that they may be preserved in a recognizable state. Crushing of shells, weathering, etc., may completely destroy or greatly alter the record.

3. Rapid burial in a protective medium capable of retarding decomposition. The covering material will usually depend on where the organism lived. These may be marine sediments, desert sand, or even volcanic ash or asphalt.

In view of these rigorous requirements for fossilization it is at once obvious why the vast majority of organisms will not be preserved. Even if satisfactory preservation should take place, many fossils are later destroyed by erosion, recrystallization, or the forces of folding, fracturing, or melting of the rocks enclosing the fossils.

TYPES OF FOSSILS

Most amateur collectors are interested in collecting invertebrate fossils, or the remains of organisms that did not possess a spinal cord. Such forms as clams, oysters, snails, ammonites, corals, etc., would be included among the invertebrates. Those persons collecting the bones and teeth of vertebrate animals would be working in the field of vertebrate paleontology, while those collecting and

classifying plant remains would be considered paleobotanists.

The remains of many organisms have been preserved in an almost unaltered condition as illustrated by the shells of many brachiopods, clams, etc. These shells are also often preserved as *molds* and *casts*. If the shell had been pressed down into the sediment before it had hardened into rock it may have left an impression of the outside of the shell which is known as a *mold*. If this mold was later filled with some other material this produced a *cast*. This cast will show the original external characteristics of the object.

Plant fossils are often found as leaf impressions or as thin films of carbon. After the plant material has been buried under the sediments it loses its volatile gases and liquids and is turned to carbon. This is known as *carbonization* and is the process by which coal is formed. Tree trunks and branches are often *petrified*—or literally turned to stone. Petrification occurs when the original woody tissue is replaced by minerals that are dissolved in the groundwaters that pass through the wood. Bones, teeth, and shells may also be preserved in this manner. These replacing minerals are usually silica, calcite, aragonite, or iron.

In rare instances some organisms have been fossilized in an almost perfect state of preservation. The famous frozen mammoths (fossil elephants) of Alaska and Siberia have been found frozen in the ice where they have been enclosed for as long as 25,000 years. When the ice thaws the bodies of these elephants are in such a remarkable state of preservation that their flesh has been eaten by dogs and the tusks sold by ivory traders!

HOW FOSSILS ARE CLASSIFIED

In order to get the maximum pleasure out of fossil collecting most amateur paleontologists are interested in identifying and classifying the material that they have collected.

The "pebble-pup" is usually content to know if his specimen is an oyster or

a snail, or a fern or a bone, but the full fledged rockhound will want to know the scientific name of the fossil.

As mentioned in the first article of this series, the language of the paleontologist is largely biological in nature, and the system of classification used in naming fossils is quite similar to the classification of living plants and animals. This system of classification, known as the system of *binomial nomenclature*, was proposed by Linné (or Linnaeus), an early Swedish naturalist. Scientific names established according to the principles of binomial nomenclature require two parts; the generic (or genus) name, plus the specific (or species) name. These names are derived from Greek or Latin words which usually tell something of the animal or plant that is being named. Greek or Latin is used because these are "dead" languages and are not subject to change. They are also "international" languages in that scientists all over the world can use the same scientific names regardless of what language they write in.

The world of nature has been divided into the animal, vegetable, and mineral kingdoms. The organic kingdoms (plant and animal) have been further divided into large divisions called phyla (from the Greek word *phylon*—a race). Each phylum is composed of a large number of organisms with certain characteristics in common. For example, all animals with a spinal cord are assigned to the phylum Chordata (having a notochord or "back-string"). Each phylum is reduced to smaller divisions called classes, classes are divided into orders, orders into families, families into genera, and each genus is broken down into species, subspecies, varieties, etc. Thus all living men belong to the genus *Homo* and to the species *sapiens*. It is obvious that there are a large number of variations among individual men, but their general characteristics are all quite similar. In writing the scientific name of a plant or animal you will note that the generic name starts with a capital letter and the specific name with a small case letter.

Both names are italicized or underlined.

The following table shows the similarity in classification of man, a clam, and the common cat:

	MAN	CAT	CLAM
Kingdom	Animalia	Animalia	Animalia
Phylum	Chordata	Chordata	Mollusca
Class	Mammalia	Mammalia	Pelecypoda
Order	Primates	Carnivora	Eulamellibranchia
Family	Hominidae	Felidae	Veneridae
Genus	<i>Homo</i>	<i>Felis</i>	<i>Venus</i>
Species	<i>sapiens</i>	<i>domestica</i>	<i>mercenaria</i>

Upon learning the basic principles of taxonomy (the science of classification)

the collector can then proceed with the identification of his specimens.

Note: The writer appreciates the many letters he has received concerning the first article in this series. He will be glad to attempt to answer any questions concerning fossils or fossil collecting for the readers of ROCKS AND MINERALS.

(In the next issue Professor Matthews will discuss the Collection and Identification of Fossils.)

Notice of Stolen Goods

At some time during the early morning hours of Sunday, December 22, 1957, the premises of MINERALS UNLIMITED in Berkeley, Calif., were burglarized. The following is a partial list of the missing items. If items of this nature and/or general description are offered to you under suspicious circumstances, we would appreciate you advising either the Berkeley Police Department or the management of MINERALS UNLIMITED of the fact.

CUT STONES

- 3 Black Opal Doublets, approximately 1" long.
- 30-40 Irregularly shaped opals, small sizes
- 30-40 Small tourmaline cabochons.
- 30-40 Jade pieces of various shapes and sizes as follows: Circlets (black and green Wyoming Nephrite), 2 Carved Elephants, 1 Carved Bird (approximately 1 1/4") of jadeite, grey-green; numerous oval and rectangular stones of green Wyoming nephrite. Approximately 10 drilled stars.
- 1 1.3 carat Titania, unset.
- 1 pr. Titania earrings, approximately 1 carat each in 10 karat gold Tiffany-style mounts.
- 10-20 Amethyst stars, drilled on one point.
- 3-6 Aventurine stars, drilled on one point.
- 8-12 Zircons, blue, white and one green.
- 1 Amethyst ring (approximate size of stone, 18-19 mm) set in new McAllister "Petal Mount" for faceted stone.

ULTRA VIOLET PRODUCTS

- 2 SL 3660 Mineralights.
- 4 SL 2537 Mineralights.
- 3 MI2 Mineralights.
- 3 NH Mineralights.
- 3 404 Battery Cases.

GENERAL EQUIPMENT

- Zeiss Opton Binocular Microscope.
- Microscope Light for above.
- Smith-Corona Typewriter.
- Allen Adding Machine.
- Assay Balance, field type, complete with gram weights and separate set of carat weights in their own box.
- Stamp "Stock Book" with approximately \$50.00 in varying values.

MINERALS UNLIMITED
1722-28 University Ave.
Berkeley 3, Calif.

\$200 Reward!

Editor R&M:

Last night someone entered my place and stole over \$2,400 worth of my best specimens. This party was careful to take only the finest specimens.

\$200.00 REWARD for information leading to the arrest and conviction of the party guilty of stealing the below listed minerals. Information confidential.

List of minerals stolen from my property
nite of Dec. 30, 1957:

- Approximately:
- 200 lbs. calcium Larsenite.
- 10 Pyrite plate crystal groups from Gilman, Colo.—2"x3" to 9"x9".
- 40 Tri-State mineral specimens Galena, marcasite sphalerite.
- 10 Amazonite crystals, Lake George, Colo.—2"x2" to 4"x6".
- 30 Franklin specimens of crystals, mixed.
- 15 Fluorite crystal groups, Illinois. Avg. 5"x5".
- 25 Quartz crystal groups from Ouray, Colo.—2"x2" to 4"x6".
- 15 Pyrite crystals from Rico, Colo., twinned, singles—2"x2" to 4"x4".

Edwin Skidmore
253 Central Ave.
Mountainside, N.J.

INFORMATION WANTED BY READERS

How can smoked minerals be cleaned?

I had one of the finest rock and mineral collections in the State but lost it in a fire Jan. 6, 1957. It was valued at about \$8,000. I salvaged a few of the nice specimens but they were badly smoked and I haven't been able to clean most of them. Can you tell me how to clean them? I will appreciate any help you can give me.

H. V. Williams
137 E. Walker St.
Breckenridge, Texas

We never ran up against a proposition like this before and so have no workable ideas to assist Mr. Williams. Has a reader any suggestions?

How can clay be removed from Turquoise?

Do you know of a way to remove a coating of clay from a turquoise nodule? What I have would make a very fine cabinet specimen but it is going to waste with that most unattractive clay coating. Do hope you may know of something.

W. Everett Berry
19 Stocker Ave.
East Lynn, Mass.

We have never cleaned turquoise but we have cleaned many minerals coated by clay. Here is our method for removing clay. Soak the mineral in water to soften the clay then rub with a stiff brush to remove as much of the clay as possible. Set aside to dry. When thoroughly dry, coat the mineral with a thin film of vaseline. To do this, smear your palms lightly with vaseline and then roll the specimen in them until it is thoroughly coated. Do not put too much vaseline as only a thin coat is necessary. If small cracks are present, rub vaseline in them with the fingers so that the mineral may be evenly coated.

We hope readers may have other methods and will tell us about them. Clay is a most annoying coating whose removal many times is extremely difficult if not impossible.

How can galena be cleaned?

Could you tell me how to clean galena? We have specimens from Baxter Springs, Kans., that usually are quite brilliant, and I am quite sure that they do not have this luster when mined. When I acquire old

collections, the specimens that were obtained from this location years ago are now tarnished to a lead grey.

Anthony Thurston
Morningdale (Bolston)
Mass.

We have no idea how galena can be cleaned to make it brilliant—perhaps some reader knows and will help Mr. Thurston (and please send us some notes so they may be printed in R&M).

What rocks & minerals are found in Nassau Co., N.Y.?

I have a favor to ask. Would you be able to give me a list of rocks and minerals found in Nassau County, Long Island, N.Y.? If you can't, could you send me the name and address of someone that can?

Barbara Bock
1 Sagamore Road
East Norwich, L.I., N.Y.

The Dec. 1946 issue of R&M (40¢) had a 12-page article on the geology of Long Island by Jay T. Fox, a member of the R&MA. This may help you as it mentions rocks, minerals, sands, fossils. Mr. Fox's address is—Fox Museum of Natural History, 3891 Maple St., Seaford, L.I., N.Y.

Vacation trip to Maine!

Editor R&M:

We are planning a trip to Maine to visit quarries and mines—the entire project to take 10 days—two for traveling and seven for collecting, with one day for church or leisure. Cabins and meals will be furnished, except meals for the first and last day. De-Luxe cabins available at a slight additional cost. Approximate cost will be about \$100 per person, for the entire trip. A variance must be expected in price as all details are not ironed out as yet. If interested parties will write me, I will try to give them more information.

We can handle 35 persons only, so, first come, first served. This trip to start July 28, 1958, for 10 days.

Franklin W. Pierce
House of Onyx
406 Ridgefield Ave.
Bridgeport, Conn.

Jan. 16, 1958

PUBLICATIONS RECENTLY RECEIVED

Gem Tumbling and Baroque Jewelry Making

(By the Victors—2nd Edition)

A few months ago Arthur Earl Victor and Lila Mae Victor brought out their First Edition of *Gem Tumbling and Baroque Jewelry Making* (see May-June 1957 R&M p. 286). This first edition of 39 pages must have sold like hot cakes because within the short stretch of about four months the Victors brought out a second edition of 48 pages (enlarged and improved).

Our congratulations are extended to the Victors on the new edition which is a mighty interesting publication with many new ideas. It, too, should sell fast so that a third edition may become a necessity.

Although the second edition has been enlarged and improved its price remains the same—only \$2.00 a copy (Washington residents please add 7% tax). Published by Victor Agate Shop, South 1709 Cedar, Spokane 41, Wash.

Plantlike Features in Thunder-Eggs and Geodes

By Roland W. Brown, U.S. Geological Survey, pp. 329-339, 6 plates.

Here is an interesting report by a government geologist on one of our popular minerals, the famous thunder-egg of the western states.

Published in 1957 by the Smithsonian Institution, Washington, D.C. (Publication 4278).

Mineralogical Studies on Guatemalan Jade

By William F. Foshag, 60 pages, 4 plates.

Published Dec. 3, 1957, by the Smithsonian Institution, Washington, D.C. (Publication 4307).

Geoloski Vjesnik

Bulletin of the Geological Society of Yugoslavia (in Slavish)—150 pages.

Published 1957 by Geoloski Vjesnik, Zavod, za geoloska istrazivanja, N. R. Hrvatske, Kupuska Ul. 2, P.p. 207, Zagreb, Yugoslavia.

Science Reports of Tohoku University, Japan

Nine reports (in English) on Japanese minerals, pp. 225-388. Published 1957 by Tohoku University, Sendai, Japan.

Virginia Publication

The Virginia Division of Mineral Resources, Box 3667, University Station, Charlottesville, Va., announces the publication of Bulletin 72, "Geology and Mineral Resources of the Gossan Lead District and Adjacent Areas in Virginia" by Anna J. and George W. Stose. There is a charge of \$2.00 for this bulletin.

The Gossan Lead District is located in Carroll and Grayson counties in the southwestern part of Virginia. A number of ores and minerals have been produced in the area, which has a diverse series of sedimentary, metamorphic, and igneous rocks. The District now produces pyrrhotite at Iron Ridge and lead and zinc at Austinville.

Radioactive Mineral Occurrences in the Bancroft Area

Volume LXV, part 6, 1956.

By J. Satterly.

A geological report on the Radioactive Mineral Occurrences in the Bancroft area (Ontario), accompanied by a map case containing 21 geological maps, plans, and sections has been released for distribution.

Copies of this report are available from this department at 50 cents each, Canadian funds.

Make remittance to the Treasurer of Ontario and address your inquiry to the Department of Mines, Parliament Buildings, Toronto 2, Ontario, Canada.

Dealers Price Lists

Grieger's—New Bargain Bulletin—a 16-page price list (in color) offering some choice bargains. Issued by Grieger's, P.O. Box 4185, Catalina Station, Pasadena, Calif.

Lapidabrade—A 12-page price list featuring lapidary items. Issued by Lapidabrade, Inc., 400 Leedom St., Jenkintown, Pa.

Miller—Fine crystallized minerals. A 12-page price list for the more discriminating collector. Issued by Hal Miller, 530 22nd St., Boulder, Colo.

Don Ward Minerals—Three long sheets featuring a special listing of museum or cabinet display specimens issued by Don Ward, 304 Catron, Santa Fe, N. Mex.

Williams—Six pages featuring some new mineral arrivals. Issued by Scott J. Williams, 2346 S. Scottsdale Road, Scottsdale, Ariz.

Club and Society Notes

Attention Secretaries—Please submit neat copies. Give dates and places of meetings. Check names for correct spelling.

Southern Appalachian Mineral Society Annual Meeting

Fred Allen of Lincolnton, N.C., was re-elected President of the Southern Appalachian Mineral Society January 25, 1958, at its annual meeting in the George Vanderbilt Hotel, Asheville, N.C.

Other officers named are Otis R. Lugar, of Waynesville, N.C., and Gerald Medd, Arden, N.C., vice presidents, and Miss Martina Wadewitz, Asheville, secretary-treasurer.

Four directors were elected. They are Dr. Thelma Howell of Highlands, N.C., and Macon, Ga.; Dr. Martin Wadewitz, of Asheville; Floyd Wilson, of Micaville, N.C., and W. E. Merritt, of Mt. Airy, N.C.

Three members of the society were adjudged winners of the first annual contest for the best mineral specimens found by members during 1957, plus 10 honorable mentions. The top winners and their specimens are:

First prize, Boyd Mattison, Chapel Hill, N.C., largest amethyst crystals with mud inclusions.

Second prize, Mrs. Robert R. Williams, Jr., Asheville, hiddenite crystal.

Third prize, Miss Martina Wadewitz, Asheville, tourmaline fan crystals in mica.

Judges for the contest were Dr. Jasper L. Stuckey, Raleigh, state geologist; Harry T. Davis, Raleigh, curator of the N.C. state museum; Dr. L. L. Smith, Columbia, S.C., South Carolina state geologist and head of the University department of geology, and Dr. George Hepting, Asheville, U.S. Forest Service.

The president's report traced the 30-year history of the club, concluding with a report of the past year which shows the club with about 175 members throughout the United States. The secretary-treasurer's report showed the club in the strongest financial position in its history.

Field trip chairman Otis Luger reported on 12 field trips held during the 1957 season. Robert Williams, Jr., chairman of the Eastern Federation of Mineral Societies' Show to be held in Asheville August 7, 8, 9, 1958, reported that committees are far ahead of schedule with prospects indicating

the most successful and interesting show and meeting in the history of the Federation.

Colburn Hiddenite to Be Shown

The famed Burnham S. Colburn collection of hiddenite will be one of the feature special exhibits at the eighth annual meeting and show of the Eastern Federation of Mineral and Lapidary Societies to be held in Asheville, N.C., August 7, 8, 9.

The Colburn collection of hiddenite is the largest and finest of this rare gemstone in existence. It consists of beautiful cut stones as well as large matrix specimens displaying the rare green crystals.

Eastern Federation Show Plans Advance

Plans for the Eastern Federation of Mineral and Lapidary Societies' Show to be held in Asheville, N.C., August 7, 8, 9 are about three months ahead of schedule due to fine steering committee work, Robert R. Williams, Jr., General Chairman, reports.

A meeting of all committee heads was held in Asheville January 25 preceding the annual meeting of the Southern Appalachian Mineral Society, host to the federation show.

Commercial booth space is more than two-thirds reserved, Gerald Medd, chairman of this committee, reports. An excellent response has been received from Federation member societies for non-commercial displays in competition, according to William Whitehouse, chairman of this division.

Special exhibits will include a number of outstanding specimens from some of the nation's leading museums, most of which have not been on public display before. In addition, these special exhibits will include the Burnham Colburn collection of hiddenite, the \$30,000 Refford Cate collection of carved jade and many others, reported Dr. James Parker and W. E. Merritt, in charge of this phase of the show.

Field trip chairman Otis Luger reported that some excellent locations have been lined up for the week following the show in the western North Carolina area known as the mineral showcase of the nation.

East

Brooklyn Mineralogical Society

In spite of the icy winds and snow-covered streets, a large number of rock hounds, hearty souls all, met on the eve of January 9, 1958, at the home of Dr. Harold Weiss, 8002 19th Avenue, Brooklyn, our usual meeting place. Many hounds brought beautiful specimens for our impending exhibit, which will take place at the Kings Highway Branch of the Brooklyn Public Library during the month of April, 1958.

After the acceptance of the minutes, Mr. Einar Whalen gave us a talk on "Gold Mining in a Small Placer Mine." Mr. Whalen is an old-time prospector, having worked the Blue Canyon Creek in California in 1932. He gave us a brief history of gold, its early use and its place in antiquity, and told us where it might be found. He discussed the size of gold grains and the density. He also brought with him his metal pans, which he has kept since his prospecting days, and demonstrated to us the method of using these pans to separate the gold grains and black sand from the unimportant minerals in the placer. He brought samples of the black sand, and showed us how the gold is separated from the black sand by amalgamating with mercury. After the mercury has amalgamated as much gold as possible, the amalgam is heated and the mercury is vaporized, leaving a button of gold. During the heating of the mercury, it is very important to stand out of the way of the fumes of the mercury, since these are very poisonous.

Mr. Whalen told us that, during his prospecting days, he earned as little as \$2 a day on some days, and as much as \$600 on other days when he found some gold nuggets. But, all in all, it was very hard and tedious work, and the small prospector rarely hit it rich. From 1932 to 1939, he said, out of about 36,000 prospectors, only about one out of a thousand made good.

He also told us about a mining engineer who bought an abandoned gold mine for \$500, intending to work it for mineral specimens. This engineer spent a few hundred dollars to pump it out, and while digging out some specimens he struck the mother lode, and in a few months sold the mine for three million dollars.

When this very interesting talk was ended, Einar passed around some speci-

mens of rocks from formations in which gold might be found.

Nils Stark, our corresponding secretary, informed us that he had received mail from several of our sick members, who, we are glad to report, are feeling better and hope to be with us soon. He also reported on his progress in making up a fluorescent lamp outfit which, we hope, will soon be available to our members.

Evelyn Hershoff, our recording secretary and member of the Publicity Committee, reported on progress in obtaining printed notices in the *KINGSWAY COURIER* and the *BAY NEWS*, local newspapers in the area, describing our organization and inviting new members.

Dr. Weiss, our President, read the report in the current *ROCKS AND MINERALS* in re our organization. Most members have not as yet received their copy, and we were therefore very happy Dr. Weiss read the report to us from the copy which he had already received. The organization voted to make R and M our official publication. Dr. Weiss will so notify Mr. Zodiac, Editor of R and M.

The membership then discussed the Eastern Federation of Mineral Societies and, upon the advice of Mr. Segelar as to the value of membership, decided to join.

Dr. Weiss told us that he had written to a mineralogy society in Arizona, to try to arrange for future swappings. He also wrote to the Prospect Park Quarry in New Jersey, to get permission for our group to visit the quarry but had as yet received no reply. Mr. Segelar explained that there was very little possibility of obtaining permission, because of serious damage done to some machinery at the quarry by a vandal and because of too many avaricious collectors. Mr. Segelar also suggested that we invite Mr. Shulman, of the Pennsylvania Club, to a meeting and have him give us some trip pointers. The Pennsylvania Club is very advanced in its trip procedure.

Publicity Extras

Professor Wilbur Valentine, Chairman of the Geology Department of Brooklyn College, is to start our educational series of meetings (the fourth Thursday in each month) with a talk on "Geology and the Mineralogist" on January 23. At that time, there will also be a showing of a sound motion picture film on "Nickel Mining in the Sudbury, Ontario, Mines." This film was made by the International Nickel Company and was very generously loaned to us

by Inco through its distributor. Dave Rothstein will show the film. This promises to be a very interesting meeting.

Mr. Segelar is forming a class of selected students to meet at his home on Sunday evenings to learn more about minerals and mineral analysis. This 15-week course is free. Only four students can be accommodated; he also very generously offered to give us a course on elementary mineralogy following Professor Valentine's course. This course will be given in four lectures, and is the same as that given by him at the Queens Mineralogy Society.

The Exhibition Committee described the work being done in preparation for our exhibit at the Library. Many members have brought beautiful and interesting specimens for the exhibit. Among these were a large sample of sulfur crystals from a volcano in Italy, a beautiful section of polished and dyed Brazilian agate, cut and polished Australian opal, and, of course, that giant piece of golden calcite that Einar Whalen brought back from our November field trip to the Chimney Rock Quarry. These are only a few of the samples. The members promised to bring additional samples at subsequent meetings.

After a short swapping session, due to the lateness of the hour, the meeting was adjourned.

Readers of R&M are invited to join our society. Information and applications may be had by contacting Dr. Harold Weiss, 8002 19th Ave., Brooklyn 14, N.Y.

The New York Mineralogical Club, Inc.

The meeting convened at 8:00 P.M., Wed., Dec. 18, 1957, at Columbia University, in Philosophy Hall, room 301, New York City, Dr. Daniel T. O'Connell presiding. After the minutes from the preceding meeting were read, the secretary read an abstract from Prof. Horace Winchell's "Wall Paper and Crystals," a talk that was presented to the club on November 21, 1957.

Dr. Stenbuck made a motion that speech abstracts should not be read, stating that those who have missed the speech do not deserve to hear it, and that those who have heard the speech do not wish to hear about it again. Before the motion could be put to a vote, Mr. Rothstein moved that the motion be taken up at the following meeting because of the scheduled Christmas party. It was agreed that the party should not be delayed.

Joe Rothstein received a letter from the Ashfield Mineral Club. They wanted to know if we are going to exhibit any of our minerals at the convention this year. This year The Northern Appalachian Mineralogical Club will be the host.

The speaker of the evening was Prof. Bain, whose topic was "Around the World from One Mineral Locality to Another." We made a vicarious trip through New Zealand and Australia, collecting minerals, through the experiences of Prof. Bain.

Back at Philosophy Hall, the Christmas party, including refreshments, was enjoyed by all. During the festivities several of the club members were able to examine some interesting specimens of calcite and chrysocolla, which Mr. Einar Whalen brought back from Bound Brook, New Jersey.

Monroe L. Weiss, Secretary
65-30 108th St.
Forest Hills 75, N.Y.

Queens Mineral Society

The meeting was commenced at 8:20 P.M. Nov. 25, 1957, with the reading of the minutes. Same were accepted after correction. The secretary then reported on the communications that he had received. Dave Hammer, Chairman of the Field Trip Committee, reported that for the present no field trips were being contemplated but that his committee would soon announce its agenda for 1958. Bill Landenberger, Chairman of the Membership Committee, submitted the following for membership: Nicholas Charysyn, Myron Paris, Thomas Heron, Diane Heron, Ada Klarman and Gene Klarman. They were duly elected to membership. Ted Fredericks, President of the Society, officially welcomed them.

Ed Marcin, on behalf of Curt Segeler and himself, reported favorably on junior membership for those between the ages of 12 and 16. In addition, certain rules were proposed in respect to participation by junior members in the Annual Club Exhibit. To conform with the Society's Constitution, the recommendations took the form of a written amendment. The secretary then proceeded to read same. The proposed amendment will be voted upon at the next meeting on January 27, 1958.

Ed White of the Program Committee reported that at the January meeting Dr. Lester Strock of Sylvania Electric Products would speak on "Zinc Sulfide as Crystals, Mineral and Phosphors."

Vic Pribil suggested that the Society be incorporated. This will be taken up at a future meeting.

Ed Marcin reported that at the present time he is teaching Elementary Mineralogy to Vicki Tuohey, Myron Paris, Emil Hernes and Matt Mencke and that very fine progress is being made.

Al Green reviewed very briefly "Anaconda Mining Company" and "The Origin and Nature of Ore Deposits."

Through the kindness of Frank Tuohey, fine specimens of graphite were distributed to the members. Tom Ronan, through Larry Ronan, donated considerable quantities of galena and sphalerite to the members.

After a short recess, the meeting resumed and Ed White introduced Robert Gensheimer of the Wah Chang Smelting & Refining Company, Glen Cove, Long Island. Mr. Gensheimer spoke on the "Romance of Tungsten." He traced the history of this strategic and indispensable metal from the time that the tin miners of Cornwall, England, regarded it as harmful, saying it "eats up the sheep as a wolf eats sheep" until the present time, when its need in electronics, high-speed steel and machining is an absolute necessity. Its use in radio, television, telephone and radar is due to its fabulous heat-resistant qualities. At present, tungsten mines are operating in North Carolina, California, Nevada, Idaho, Utah, Colorado, Washington, Wyoming, Montana and Arizona.

Mr. Gensheimer also spoke about the processes necessary to produce pure tungsten. A feature of his very interesting and instructive talk was an exhibit showing the results of these processes from the original mineral to the finished product—tungsten in bar form.

During the question and answer period, Mr. Gensheimer and his two assistants distributed to the members a fine book published by The Tungsten Institute entitled "Tungsten" and samples of various tungsten ores.

At the conclusion, Ted Fredericks, on behalf of the Society, thanked Mr. Gensheimer and his two assistants for a pleasant evening.

The meeting adjourned at 10:15 P.M.

Louis H. Roth
Secretary, Queens Mineral Society
114-67 223rd St.
Cambria Heights 11, L.I., N.Y.

Nassau Mineralogists

A recently organized club—the Nassau Mineralogists—holds its meetings the first Monday in each month from 8-10 P.M. in the North Shore High School, Glen Head, Long Island, New York.

A varied program has been prepared for the coming year and includes lectures, movies and round-table discussions as well as regularly scheduled field trips. Possible future club activities are lapidary work, jewelry making and chemical identification of minerals.

Visitors are always welcome.

F. E. Mecke, Secretary
16 Elm Place
Sea Cliff, L.I., N.Y.

Rockland County (N.Y.) Mineral and Gem Society

Twenty-eight members and guests attended the Annual Xmas dinner at Kruckers for the installation of the Officers for the year 1958. The following were installed into office.

Mr. William Aitken of Westwood, N.J. will preside as the President of the Society. This is a particular honor as Mr. Aitken was a past-president of the Eastern Federation of Mineralogical and Lapidary Societies.

Mr. Gilbert Pugsley will be the alternate as Vice-President. Mr. Pugsley has always been very active in the club's activities, being one of its past Presidents.

Mrs. Olga Simon consented to take the recording Secretary. Mrs. Simon is always active in civic affairs, especially with the Nassau Ambulance Corps.

Mrs. Marguerite Collyer was reelected as corresponding secretary. Mrs. Collyer is also Chairman of the Educational and Program Aids for the Eastern Federation of Mineralogical and Lapidary Societies, which comprises 31 clubs from Maine to Florida.

Mrs. Agnes Pugsley was reelected to the post of Treasurer, and Mr. John Weitmann, the retiring President, was elected as Director to serve a three year term. The other directors are Mr. Louis G. Collyer and Mr. William Rode.

Meetings are held at the Finkelstein Memorial Library, Spring Valley, N.Y., on the last Friday each month at 8:00 p.m. Guests are always welcome.

Mrs. Marguerite Collyer,
West Nyack, N.Y.

Fulton County Mineral Club

November 18, 1957—

The motion was made and seconded that members who have attended meetings most irregularly, or what is known in the vernacular as "deadwood", be dropped. Those, who really are interested in belonging, but have good reasons for not attending regularly, can become either Associate or Honorary Members; the Associate Members will pay partial dues. However, it was decided to keep all dropped or prospective members' names for reference.

Lewis Valachovic gave a very interesting report on his weekend trip to Franklin, New Jersey, and, in connection with his talk, display 1 various fluorescent minerals.

December 2, 1957—

Andrew Palmer, president of the club, and instructor of Earth Science in the Gloversville Schools, gave a very interesting and informative talk on Chemicals and Chemical Compounds in Relation to Rocks and Minerals.

December 16, 1957—

John Parsons, Shop Instructor in the Putnam Central School, was the guest speaker. He showed unusually beautiful slides of mineral sites in the West including National Parks and Monuments.

January 13, 1958—

The guest speaker was Professor Lloyd McCoy, Science Instructor in Johnstown High School, who had as his subject "High School Science in Relation to Present Day Developments."

The president advanced ideas for the nomination of officers in February. The club finally decided that nominations were suggested at a meeting during January and written ballots were to elect new officers.

Lewis Valachovic suggested that members bring ideas for field trips to the next meeting; also ideas for celebrating our first anniversary.

After the meeting was adjourned, John McCrevey showed a collection of minerals of unusual types and gave brief explanations about each.

January 13, 1958—

Bob Bedford showed slides taken on some of last summer's field trips and brought outstanding samples of minerals collected on those trips. He proved that our field trips of last year were most profitable ones.

Suggestions were made by some of the members for field trips for this year.

Allen Niles exhibited a nice collection of gem stones.

The next speaker, on January 27th, will be Catherine Streeter, who will give a resume of last year's field trips.

Catherine Streeter,
Reporter
368 Bleecker Street,
Gloversville, N. Y.

Antrim Area Mineral Club

We wish to announce the formation of the Antrim Area Mineral Club.

The third meeting of the club will be held Saturday, January 25th, 1958 at 7:30 P.M. at the Antrim Library Hall, Antrim, N. H. All regular meetings are held on the last Saturday of each month.

Our club at present has thirty members and is comprised of people from Antrim, Bennington, Greenfield, Henniker, Hillsboro, Peterborough, Temple, and Wilton.

Field trips to explore the realms of mineralogy and geology are scheduled to start early in the spring.

Carlyle C. Ireland
Secretary
Forest Road
Greenfield, N. H.

Southeastern N.H. Mineral Club

Wade L. Smith of Somersworth was elected president of the Southeastern N.H. Mineral club at the annual meeting of the organization Wednesday evening, Nov. 13, 1957. The session was held at the home of Mr. J. W. Howe of Bagdad Road, in Durham, N. H.

Other officers who assumed their duties in January were Edward A. Nevison of East Lebanon, N. H., vice president; Mrs. Alice W. Dietrich of Dover, secretary; and Mrs. Edward Howe of Durham as treasurer.

During the business meeting, a report was given on the October field trip to the old mica mine on Parker Mt., in Strafford, where some unusual minerals are to be found.

Later in the evening Mrs. Howe showed her collection of crystals, and gave a talk on the six crystal systems.

Connecticut Valley Mineral Club

Dr. Clifford Frondel, Professor of Mineralogy at Harvard University, spoke at the May meeting of the Connecticut Valley Mineral Club in the Natural History Museum, Springfield, Mass. His subject was "The Early History of the Mineralogy of Uranium in the United States."

Dr. Frondel emphasized the importance of the amateur and semi-professional collector, stating that almost all the early U.S. discoveries of uranium and many other minerals were made by non-professional collectors.

Philadelphia was an important center for the amateur student of mineralogy in the 1800's. New York City also contained large numbers of dedicated amateurs who made systematic studies of the minerals of their area and laid a strong foundation for professional studies which came later.

The first discovery of uranium in this country was made in Baltimore, Md. about 1814 by a ship-owner and amateur student of the sciences, named Gilmore. Dr. Frondel said he believes this original specimen still exists in the Bowdoin College collection but is in a packing case and not now available to the public.

Uranium was next found in one of the pegmatites at Middletown, Conn. about 1837. This specimen is in the mineral collection of Yale University.

About 1895 uranium was found in Colorado. The finder, Tom McKee, could not identify his discovery and sought help from a French engineer who was working in the area. The specimen was sent to France where it was determined to be a new species. The French investigators gave it the name Carnotite, in honor of a French scientist named Carno.

The identification of the new mineral as a form of uranium set off a boom in Colorado. Many claims were staked and a great amount of ore was dug out. However, no one wanted uranium at the time and the boom died out.

Dr. Frondel described the various forms of uranium and the increasingly important role this mineral is playing in our society.

Mr. Lawrence Schoppee, field trip chairman, announced the following schedule:

May—Cheapside Quarry, Deerfield, Mass., traprock minerals

June—Fonda, New York, Herkimer Diamonds

July—Gassett's, Vermont, gold panning

September—Norway, So. Paris, Maine, three-day-trip for pegmatite minerals.

James W. Burke, Secretary
North Amherst, Mass.

Rhode Island Mineral Association

Out here in Rhode Island we have organized a mineral club by the name of the Rhode Island Mineral Association.

It is our desire to have amateurs like

ourselves who are also interested in minerals to have the opportunity to join our new club. The membership is free for the first year and if they want to contribute news items or small sums of money they may have their names inserted into our bi-monthly bulletin.

At the present time we have but ten members in our club but are hopeful for increased membership in the near future. Those interested in joining our club may contact me at the following address:

Daniel Lapolla
1420 Hartford Ave.
Johnston 9, R. I.

New Jersey Mineralogical Society, Inc.

We meet the first Tuesday in the months of September to April from 8:00 to 10:00 P.M. at the Plainfield Public Library, Plainfield, N. J.

Our May Field Trip was to the Imperial Jade, Ltd. at Colts Neck, N. J. for Wyoming Jade and led by Joseph R. Sabo. The jade purchased was in various shades of light to rich green. The most interesting combination being pink epidote and green jade, also, zoisite (pink) a variety of thulite with green jade.

The annual weekend Field Trip in June was to the Portland and Middletown, Conn. pegmatite areas and the trip was led by Alexander F. Knoll. The first day we visited the famous Strickland Quarry at Portland, Conn. and collected good specimens of beryl, lepidolite, columbite, cookeite, fluorescent spodumene and capillary tourmaline. In the afternoon we collected at the Toll Gate Mica Quarry in Middletown, Conn. The autunite xls weren't as plentiful but quartz xls, albite xls, beryl, columbite and fluorescent manganapatite were some of the minerals collected here. The next day we spent at the New Hale Quarry in Glastonbury, Conn. and beryl, apatite with a very interesting bladed structure, including fissures of garnet were collected.

The July Field Trip was to the National Soil Conservation, Inc. at Medford, N.J. to collect fossils in the greensand marl. The trip was led by Joseph Groben, our President. We collected plenty of sharks teeth, internal casts of pelecypods (vanuxemia), crinoids and internal casts of gastropods. The greensand in which the fossils are found is of equal interest. It consists of glauconite which is anhydrous iron potassium silicate in which the iron is in the ferrous condition giving the mineral its characteristic green color. The physical condition

of the mineral promotes its use as a soil conditioner. It also contains in addition to potash, iron, phosphate, lime and magnesia, traces of boron, cobalt, manganese and copper, etc.

Our August Field Trip was to the Buckwheat Dump at Franklin, N.J., and the trip was led by the Franklin mineral specialists, Robert W. Stirling and Louis F. Stirling. Even though the day was "dewy" many attended. Bob set up his usual fine display of Franklin minerals as an aid in identification—under a glamorous terrace umbrella this time. He also had a chart divided into zones with typical specimens attached as an aid in locating the various minerals. They both know the mineral associations at Franklin very well. Fluorescent specimens, galena, microcline and zincite were a few of the many minerals collected.

In my Society Notes in **ROCKS AND MINERALS** July-August, 1957, I mentioned megovernite from Franklin, N.J. Although we collectors think of all minerals collected in Sussex County, N.J., as "Franklin" minerals, to be specific, megovernite is only found at Ogdensburg, N.J., and should be labelled accordingly.

In our August Society Bulletin, Joseph Groben announced that Minerals Unlimited in their price list for August, 1957, publicized Doverite as having been discredited as a species. Recent work has shown it to be Yttrium bearing var. of Bastnaesite. Your specimen should be relabelled accordingly.

Our September Meeting under the leadership of Oscar R. Smith, Program Chairman, was devoted to the member's summer collecting experiences. Reports were given on trips to Colorado, Penfield, N.Y., Kentucky, Maine, Vermont and Miami, Fla. Specimens were displayed from Colorado, Penfield, N.Y., Miami, Fla., Juds Bridge, Conn., and Redding Station, Conn. Everyone seemed to have had a good mineralogical summer.

Our September Field Trip was to the very interesting Limestone Products Corp. at Lime Crest, N.J., and led by Joseph R. Sabo. This immense, active quarry is always very rewarding to mineral collectors. The Limestone Products Corp. was very hospitable. Among a few of the specimens collected were ruby corundum xls, molybdenite, tremolite xls, apatite xls—6"x2", scapolite xl—6", sphene xls and amphibole xls, also fine massive graphite and pyrrhotite. Even tomatoite—one little plant with two green tomatoes—one was collected.

The speaker at our October meeting was Earl M. Eilerts, employed by J. P. Morgan & Co., and an ardent mineral collector. He spoke on the micas, and particularly those from the Strickland Quarry, Portland, Conn. He had a fine exhibit of the various grades, mica with magnetite inclusions, xls of phlogopite, muscovite and biotite. He mentioned the various grades and commercial use. A very interesting program.

Our October Field Trip was to the limestone and serpentine deposit at Montville, N.J. A long-lost locale but with diligent reconnaissance found again by Robert W. Stirling and Louis F. Stirling. Louis (Pop) Stirling led the trip. We collected noble serpentine in various shades of green, diopside (fluoresces light yellow), tremolite, chrysotile, pyrites and hyalite—the last by none other than Peter Zodac, who we were more than pleased to have with us. A fine cabochon of the noble serpentine was cut and polished by Wilford Beveridge and sent to the lady in whose back yard we had all parked, with the compliments of the Field Trip Committee.

We have had many interesting field trips, good attendance and leadership by the various members of the Field Trip Committee. We have learned a great deal about mineral associations and had loads of fun.

At our October Mineral Sight-Identification Session, Joseph Groben brought a suite of spectacular specimens from South Africa. Alex Knoll had a suite of 50 minerals from various locations for "guess what." George Lang showed Mariposite and "Peanut stone" from Calif. Wilford Baldwin exhibited quartz and albite xls from Harvard Quarry, Maine. Joseph R. Sabo showed a white sphalerite specimen from the Buckwheat Dump at Franklin, N.J., for his "guess what."

The speaker at our November meeting was Michael McCabe, Public Relations Supervisor of the New Jersey Bell Telephone Company. He spoke on crystals and magnets and demonstrated the use of them in reproducing sound and in communication. Of particular interest were the demonstrations of piezo-electric effect in crystals. A motion picture was shown of large-scale methods of producing synthetic crystals for piezo-electric work. Mr. McCabe mentioned the best natural quartz crystals came from Brazil and weighed up to 50 pounds each, also that they used synthetic crystals made by the Western Electric Company. The magnets are used in the telephone receivers, relays, etc. A most interesting program.

The door prize of an assortment of loose Herkimer "diamonds," donated by William Spencer, was won by Mr. Stefanic.

The November Mineral Sight-Identification Session's theme was Micro Mounts. Through the efforts of the Baltimore Mineral Society, under the leadership of Dr. Paul E. Desautels, we were privileged to view a Slide and Commentary Series on micromounting covering the procedure of preparation to finished micro mount. Many slides were included to show the exquisite beauty of micro crystal specimens. A few shown were Heteromorphite, a sulfide from Roumania; Strengite, a very rare phosphate from Hagendorf, Bavaria; Caberite, a magnesian variety of the erythrite-annabergite series from Laurium, Greece, and the beautiful Cyanotrichite, a rare basic copper sulfate in skyblue minute xls from Moldawa, Banat. We were all very impressed with the specimens shown and the fine photography. The series is on loan to interested groups.

We had two microscopes at our session, a binocular brought by Joseph Groben, and Alex. Knoll's monocular. Members brought in their own micro mounts for others to enjoy. This was one of our most interesting sessions and created a great interest in micromounting.

Visitors are always welcome at our meetings.

Mrs. Alex. F. Knoll
Publicity & Public Relations Chairman
532 Edgar Road
Westfield, N.J.

North Jersey Mineralogical Society

The annual Christmas party and election of officers was held on Thursday evening, December 12th, at the Public Library, 250 Broadway, Paterson, N.J. About 70 members attended.

Officers elected for the year 1958 were: *President*, A. J. Delario, M.D., Paterson *Vice President*, Gene Vitali, Haledon *Secretary*, Alypia P. Wendt, Boonton *Treasurer*, Charles F. Schueber, Wayne *Directors*, Warren L. Duncan, Hackensack Wilfred R. Welsh, Allendale (The third member of the Board of Directors—now in office—William Pfeifer, Radburn).

The business meeting was brief so the festivities of the evening might be enjoyed to the fullest extent. William Pfeifer, Program Chairman, introduced our guest conductor—Mr. M. E. VanHouten, of Fairlawn, N.J., who led the singing of Christmas hymns and carols, accompanied by our able

accordionist, Harold Gabriels, of Bergenfield, N.J. A lovely vocal solo—"Oh Holy Night," sung by Mrs. Charles Schueber—was a joy to hear and brought to all full realization of the true meaning of Christmas.

A feature of the annual Christmas party is an exchange of mineral specimens or gifts of a related type, and many expressions of delight were heard as the packages were opened. Several of the "specimens" were mounted in bracelets and, although Mr. Stevens and Mr. Weimann were the fortunate recipients, we are sure the bracelets will grace the charms of Ethel Stevens and Olive Weimann.

Following distribution of the gifts, refreshments were served by Miss Marie Kuhnen and her committee. A huge Christmas cake, delicious cookies and candies, all disappeared amid much merriment and good cheer and then—"MERRY CHRISTMAS TO ALL AND TO ALL A GOOD NIGHT."

Meetings of the North Jersey Mineralogical Society are held the second Thursday evening of each month at the Public Library, 250 Broadway, Paterson, N.J.

An interesting program has been planned for the coming year, and visitors will be heartily welcome to attend any of our meetings.

(Mrs.) Louise W. Borgstrom
Chairman, Publicity Committee
Elcock Avenue
Boonton, N.J.

Mineralogical Society of Pennsylvania Semiannual Meeting and Field Trip

The season's outdoor activities of the society came to a close in a burst of glory Sunday, Nov. 10, 1957. In the morning about 100 avid collectors were the guests of Thomas Migliore, President and General Manager at the Royal Green Marble Company's Dumps located about a mile and a half above the town of Phillipsburg, N.J. Arrangements for collecting at this fascinating metamorphic formation were made by our Dr. Montgomery, who was kept busy with his assistant, Maurice Winner Jr., Lafayette '55, a geologist now with the U.S. Army, in identifying the 15 different distinct species found during the day. To date 25 species have been found and identified. The rarer species lived up to their reputation by being so elusive that the odds of 100 to one were not good enough. Bob Hausler beat the odds and earned immortal fame by turning up a specimen new to this



Photo by Harold Evans

So that's what to look for!
M.S.P. at Royal Green Quarry, Nov. 10, 1957

location. It has been identified as BROWN TOURMALINE, Var. Dravite and in a dark talcose rock. Identification of the 15 species found, as well as their collection was considerably expedited by means of a display case of labeled type specimens found in recent months, prepared by Dr. Montgomery. John H. Jensen found a magnificent specimen of Phlogopite. Mrs. Morton collected an unusual calcite specimen of blue color. Leighton and Robert Donley made our eyes pop and our fingers itch with their display (generously shared) of brilliant crystallized specimens of Laumontite, Natrolite, Apophyllite and Analcite from their new discovery in the underground diabase of the Cornwall Iron Mines. These identities have been optically checked. Past President Harold Evans caught the activities of several members on film in his usual proficient manner. Ed. McFarland treated us to a dazzling view of some fabulous specimens of Azurite partly altered to Malachite he had just acquired from an old collection. His problem was—from whence? The experts opined that the crystal form suggested Chessy, France.

After a short recess the group reassembled at Lafayette College's Geology Department to admire and study the various exhibits of

Geology, Fossils, Lapidary, Fluorescent, Gems and type mineral specimens prepared by the faculty and students in order to provide something attractive and educational for all. Some of the highlights were the rare radioactive specimens of the Gehman collection, museum specimens of crystals and the superb collection of mineral spheres cut and polished and loaned by Mr. B. F. Shepherd, chief metallurgist of the Ingersoll Rand Co., makers of mining machinery.

The crowning glory of the day and the season was a fascinating Kodachrome illustrated journey to the scenic wonders of the geology, flora and fauna of the "Rocky Mountains and Glaciers of the Northwest," presented by Dr. James L. Dyson, chairman of the Lafayette College Geology Department. He cleverly interspersed humor and science with dramatic scenes whose impact brought forth spontaneous ohs and ahs from the large audience.

A short business session followed.

Our thanks to the men of Lafayette and the Royal Green Marble Co. for an enjoyable and fitting end to our season's activities.

J. H. Bertrand, publicity
301 N. 10th St.
Easton, Pa.

South

Fort Worth (Texas) Gem & Mineral Club

At the regular meeting in January the Fort Worth (Texas) Gem and Mineral Club elected the following officers:

President—J. A. D. Todd

Secretary—Dorothy Holden

Treasurer—Victor Hothe

Corr. Sec.—Bessie W. Simpson

The club meets the first Friday of each month in the Children Museum, Fort Worth, Texas. Visitors are always welcome.

Bessie W. Simpson

Corr. Secretary

Box 537

Granbury, Texas

Gem & Mineral Society of Mississippi

We have had a great time in organizing the "Gem and Mineral Society of Mississippi." After three meetings have close to 40 in the club. We are moving and our corresponding secretary will be writing you before long telling you about the details.

Wendell B. Johnson

Gem & Rock Shop

Box 9921

Jackson 6, Miss.

Alabama Mineral and Lapidary Society

A new mineral club has been formed in Alabama and given the name, Alabama Mineral and Lapidary Society. For particulars contact the secretary, James Miller Davis, 212 Guaranty Savings Building, Montgomery, Ala.

Miami Mineral & Gem Society

On Jan. 1, 1958, at the Annual Meeting of the Miami Mineral & Gem Society, the following officers were elected for 1958:

President—J. C. McClure

1st V. Pres.—J. Gordon Earley

2nd V. Pres.—Olga Van Kirk

Treasurer—J. M. Stoinoff

Secretary—Louise Hollister, 4150 Park Ave., Miami, Fla.

Gemcrafters of Miami

On Jan. 7, 1958, at the Annual Meeting of the Gemcrafters of Miami, the following officers were elected for 1958:

President—A. C. Banks

Vice Pres.—Mrs. E. A. Pool

Treasurer—Curtis Duncan

Secretary—Mrs. M. S. Harley, 1501 N.W. 132nd St., Miami, Fla. (Tel. MU 1-2253.)

Mid-West

Nebraska Mineral & Gem Club, Inc.

Meetings held the third Wednesday of each month, September through May, Print Room, Joslyn Memorial Art Museum, Omaha, Nebr. The Secretary is Mercedes Eisele, 3015 Whitmore, Omaha 12, Nebr.

Michigan Mineralogical Society

Meetings are at the Cranbrook Institute of Science, Bloomfield Hills, Mich., second Monday of the month, September through June. Corr. Secretary, Eloise O. Goddard, 24429 Green Valley Dr., Detroit 19, Mich.

Tri-City Rock & Mineral Society

We received a blue ribbon (first prize) and a purple sweepstakes ribbon on our Rock and Mineral exhibit at our County Fair last fall, as well as a blue ribbon on our jewelry.

While demonstrating the making of jewelry at the Fair, I used the opportunity to recruit prospective members for a new club which we now have well under way. We enrolled 53 members at our first real meeting in December. We call our club Tri-City Rock & Mineral Society because it is comprised of members from Bay City, Midland and Saginaw.

Mrs. Marion E. Hull

704 Gratiot Ave.

Saginaw, Mich.

Michigan Gem & Mineral Society

Meeting place: Cafeteria, West Intermediate School, Jackson, Mich., first Thursday of each month except July and August. Secretary: Helen K. Barnhouse, 6517 Mapledale Road, Jackson, Mich.

Hancock Geological Society (Findlay, Ohio)

At our last meeting, Jan. 14, 1958, we held a "Rock Auction." Each member brought specimens from his collection and they were auctioned off among the members; the money then went into the club's treasury. It proved to be an interesting evening and also a profitable one for the club.

Mrs. Carole Huntley
Van Buren, Ohio

Cincinnati Mineral Society

The officers of our Society for 1958 are:

President—James Gilbs

V. Pres.—Adrian Rush

Secretary—Mrs. George E. Keppel

Treasurer—Mrs. John W. Pagnucco

Corr. Sec.—John W. Pagnucco

The Society meets at the Cincinnati Museum of Natural History, 1104 Walnut St., Cincinnati, Ohio.

John W. Pagnucco
130 Vermont Ave.
Wyoming, Ohio

Indiana Geology & Gem Society

The Society meets at the Children's Museum in Indianapolis, Ind. The Christmas party, held on Friday, Dec. 13, 1957, saw a good turnout despite winter weather. It began with the briefest of business meetings and, much later, ended with punch and cookies, great informality, much conversation, games and door prizes. Two of the prizes were subscriptions to **ROCKS AND MINERALS** (to Dick Kinnett) and **GEMS AND MINERALS** (to Ann Johansen).

Secretary: Mrs. Gladys E. Grandy, 717 E. 52nd St., Indianapolis, Ind. (Tel. AT 3-8831.)

Rocky Mountains

Albuquerque Gem & Mineral Club

At the Annual Meeting of the Albuquerque Gem & Mineral Club, held Jan. 27, 1958, in the Geology Bldg., University of New Mexico Campus, Albuquerque, N.M., the following officers were elected:

President—John F. Beavers

Vice Pres.—Mrs. Lois K. Heister

Bert Gossett

A. L. Zerwer

Treasurer—Don Johnstone

Secretary—Mrs. Elsie Emig

Corres. Secy.—Mrs. Alma Ruth Olheiser

Rawlins Rockhounds

Following are the 1958 officers of Rawlins Rockhounds:

President—Gail Willis

Vice Pres.—J. G. Sundberg

Sec.-Treas.—Ned Cross

Corres. Secy.—Duke Parrish

Director-at-Large—George K. Staples

Historian—Byron Sundberg

Duke Parrish

411 W. Davis St.

Rawlins, Wyo.

Mineralogical Society of Arizona

The Mineralogical Society of Arizona celebrated its 22nd birthday Dec. 6, 1957, with refreshments and impromptu talks by the members. Arthur L. Flagg, co-founder, told about the society's first field trip to a vicinity near the Biltmore guest ranch for cyanite. Their first meetings were held in the Arizona Museum. The members' talks covered a wide variety of experiences both instructive and humorous. Mrs. Bob Laughlin brought greetings from the Rocky Mountain Federation and exhibited Wyoming jade jewelry. She said their newest interest is jade with quartz crystals. There will be a Wyoming jade display at the Phoenix gem and mineral show in March.

December 20th a fine Christmas program was presented by Miss Agnes Holst, Phoenix musician and choir director of Faith Lutheran Church and president of the Maricopa Lapidary Society and vice president of the Rocky Mountain Federation. Members of her choir sang *Gesu Bambino*, *Mid Winter*, *Beneath a Southern Sky*, *No Candle Was There*, *While Stars Their Vigil Keep* and *Birthday of a King*. The songs were accompanied by a tape recording of organ music by Mrs. Ruth R. Kuhl, church organist. The program was followed by singing of carols by the audience.

December field trip was to the Silver Reef mine near Casa Grande, where lead, zinc and copper minerals were found. There were 18 cars in the caravan, among which was one small, foreign car. A group of Papago Indians watched with much interest as the caravan passed through their reservation, and laughed delightedly when the tiny car came along filled to capacity.

Ida Smith, Cor. Secy.

2238 East McDowell

Phoenix, Ariz.

Tucson Gem and Mineral Society

The fourth annual *Gem and Mineral Show* of the Tucson Gem and Mineral Society will be the opening event of the *Arizona Gem and Mineral Fiesta*. Tucson's show will be held Friday, Saturday and Sunday, February 28—March 2, 1958, at the Pima County Fairgrounds. There will be a field trip on Tuesday following the show, other field trips with the Phoenix clubs during the week, and the Phoenix societies will hold their show the following weekend. Since the Rocky Mountain Federation of Mineralogical Societies will be holding their convention in Phoenix at the same time as the Phoenix show, the south-

ern part of Arizona should be a fine place for "rockhounds" at that time.

At the last regular meeting of the Tucson Gem and Mineral Society, Harry Olson, a geologist who is doing graduate work at the University of Arizona, gave us a fine talk on the Glove Mine, Santa Cruz County, and its large wulfenite crystals. At our next meeting, Ray Warring of Butte, Mont., will show slides and speak on his experiences hunting for mineral specimens in Korea and Japan.

Mrs. Irene Barber,
Publicity Chairman
Rt. 9, Box 907
Tucson, Ariz.

Wasatch Gem Society

January 16, 1958, was our election night for the year. Meeting place: Y.W.C.A., 322 East 3rd South, Salt Lake City, Utah. Time: 8 P.M. third Thursday of each month.

Officers for 1958:

President—W. Hugh Burnside

Vice Pres.—Norman Hamilton

Treasurer—Mrs. Elliot Bird (Marie)

Secretary—Mrs. W. Russell Anderson (Mary), 402 East State Hi-Way, Copper-ton, Bingham Canyon, Utah.

California

Riverside Gem and Mineral Society, Inc.

The Riverside Gem and Mineral Society, Inc., met at the home of Mrs. Bessie Graser, 5380 Sixth St., Riverside, Calif., for the election of officers. Elected to the Board of Directors to serve for two years were: Clarence Wonderlick, Tom Harwell, James Martin and Ralph Hasdal. Officers for the year are: Pres., Clarence Wonderlick; Vice Pres., Lynn M. Skinner; Sec.-Treas., Ralph Hasdal; Field Trip Chairman, Tom Harwell; Soc. Sec., Mildred Holmquist, and Publicity, Frances Spencer.

Frances Spencer, Publicity
4981 Mitchell St.
Arlington, Calif.

Continue as Is!

Editor R&M:

I don't know how you could improve R&M in general. I suppose some departments could be enlarged but then some subscribers interested in another phase of the magazine would desire those departments enlarged. So—just continue in your own good style.

Jan. 22, 1958

Clyde C. Campbell
705 Harrison Ave.
Harrison, Ohio

Oil Seepage indicates oil deposit!

Editor R&M:

I am writing in reference to a letter in the Sept-Oct 1957 issue of R&M from Gerald Navratil (page 48) asking the relationship between oil seepage and subsurface oil deposits. No doubt other readers have already answered this question but I thought that I would write in anyway.

Oil seepages furnish direct evidence of the presence of petroleum in the area. They originate when a subsurface deposit is brought close enough to the surface to be within the zone of fracturing by erosion, or is tapped by faults and fractures possibly at greater depth. The oil then seeps to the surface along the fractures, joints, and fault planes, or through any connected porous openings in the rock.

The subsurface pool, however, is not necessarily in direct traceable connection with the seepage. Most often the relationship between the two cannot be observed. Moreover, the previous accumulation which furnished the seepage may have been so nearly removed by erosion that no recognizable pool now exists in the area and the seepage is merely the remnants of a previous pool.

Many large and important accumulations have been discovered by drilling nearby oil seepages and there is no doubt that these seepages furnish evidence of a source rock in the area which, when combined with the necessary conditions for oil accumulation, may form deposits of commercial value.

Dec. 21, 1957

R. Wallace Knapp
112½ N.W. Ave. E.
Andrews, Texas

An Invitation from Aruba!

Editor R&M:

We have just received our first issue of R&M and are extremely well pleased with your magazine. We are sorry that we hadn't heard of it years ago.

Our small island is very interesting geologically and we hope to send you some specimens both of rocks and sands before long. If any of your readers take a West Indies tour and reach Aruba, ask them to get in touch with us.

Jan. 20, 1958

Pauline and Bill Learned
P.O. Box 566, Lago Colony,
Aruba, Dutch West Indies

WITH OUR ADVERTISERS

Conducted by James N. Bourne
c/o Rocks and Minerals, Box 29
Peekskill, N. Y.

Advertisers are cordially invited to submit News Items to this Department

From Earl Smith of Geode Industries, 106 West Main St., New London, Iowa, we received the following note re: to a very nice specimen sent to us for our collection. His note reads:

"We are forwarding to you under separate cover a geode containing dark cubic crystals which as far as we can determine are of the calcite group and could be siderite. To our knowledge this is the first quality find of this type to come out of our area."

Note: Specimen received is a very nice geode lined with quartz xls, and cubic xls of brown calcite. Specimen came from Clark Co., Mo. Thank you Mr. Smith.

"Geode Industries specialize in fine crystallized geodes and mineral specimens. We also carry rough and slabbed gem materials, Lapidary equipment, mineralights, Geiger counters, and gem cutting supplies.

"We advertise regularly in R&M with each issue and we will give prompt attention to all inquiries and orders received by us. Look up our display ad in R&M with this issue and send us your order today."

From K & S Stevenson, R.D. 1, Port Jervis, N.Y., we received the following item that I'm sure will be of interest to our readers:

"We offer a selection of Willemite, Calcite, and Franklinite from Franklin, N.J. We feel that because of the care taken in selecting and packaging these minerals, the subscribers and readers of your magazine who are interested in obtaining one or more of our offerings (no two alike) will not be disappointed.

These kits make an attractive display and would not be out of place in anyone's specimen cabinet.

"Your *Rocks and Minerals* magazine is an ideal publication for rockhounds and can be referred to with confidence as an authority on rocks and minerals. Collectors who buy material through your ads have a right to feel confident that specimens for sale are as advertised. Knowing your interest in a square deal for customers as well as for your subscribers, we are sending you one of our kits. Sizes of specimens vary but we try to maintain 2 inches or better. All are fluorescent. May we please have your comments on this representative collection? Kit containing 12 fluorescent specimens sells for \$3.75 p.p. in United States."

Note: We received a very nice kit containing 12 specimens, each over two inches in size, of willemite, calcite, and franklinite from Franklin, N.J. This kit of (highly fluorescent) minerals is well worth the price of \$3.75 p.p. in U. S. Order your kit of 12 specimens from K & S Stevenson, R.D. 1, Port Jervis, N.Y. They are attractively boxed with specimens set in styrofoam and you'll be well pleased at making this purchase. Specimens fluoresce beautifully and will make a wonderful addition to one's collection. Thank you for your generosity Mr. Stephenson.

Once again we are pleased to hear from George A. Bruce, Pres., of International Import Co., 604 Peachtree St. N.E., Atlanta 8, Ga. A note from Mr. Bruce reads as follows:

"Please tell the Editor that I am send-

ing him as well as you, one of the agni manis with every good wish for a Merry Christmas. I can only repeat that the exact locale of the majority of these cannot be given. However, the two I am sending are from the Philippines. These are known as rizalites.

"I will probably have an article on them in the June Lapidary Journal to clear up, for all time, I hope, the difference between the various oriental varieties. I hope he will like this and that you will also."

Note: the two specimens of agni manis received and known as rizalites were of the following sizes, 1 of $\frac{3}{4}$ " size, and the other of about $\frac{1}{4}$ of an inch, deep black, rounded, heavily pitted glassy masses (at first glance they resemble the obsidian known as apache tears). These specimens are very nice and we urge readers to contact International Import for their purchase of one or more of these rare agni manis while they last as supply is rather limited. We compliment George A. Bruce for his continued effort in acquiring very fine material at reasonable prices for those so interested and are in deep appreciation for his gift of a specimen of agni manis to the Editor of R&M and yours truly. Our thanks to you Mr. Bruce.

We are very pleased to insert the following literature received from Byron and Lottie Shipley Rohde, proprietors of Shipley's Mineral House, Gem Village, Bayfield, Colo.

"Shipley's Mineral House is the outgrowth of a Hobby, and we grew up with Gem Village, which is the only organized Rock Colony in the United States. We bought our first store license in Nov. of 1947. Our first building was 40 x 16. Fact is we have added to the building twice in the past ten years. The last addition gives us 100 ft. store frontage. We have the only public Lapidary shop in the San Juan Basin. (The only shop in the Basin where people can see cab cutting etc. being done)

Mr. Rohde teaches cab cutting and we take a great interest in beginners and people who have never seen the work being done before.

"For the lapidary we carry a complete line of lapidary supplies, and seven different brands of standard lapidary equipment. This equipment is in stock for the customer to see and it is demonstrated that they may make their choice.

"We also manufacture jewelry and offer the public jewelry repair. We mount in gold, silver or platinum, and have all types of cab cutting, faceting, encrusting and engraving. As far as we have been able to determine we are the first to manufacture Gem Stone buttons for the dress trade. These buttons are made from any type of material from the diamond to the lowly soapstone. They are mounted in Gold, Silver or Platinum.

"We carry an extensive stock of rough cutting materials, native and foreign. A wide selection of mineral specimens both for the beginner and the advanced collector. Then we have the finished gift items, all types of jewelry both foreign and American made. These can be obtained in gold, silver or platinum or Chinese fine silvers. We specialize in carvings and small figurines. Carvings can be obtained for collections or for jewelry items."

Note: Take notice of Shipley's display ad in this issue of R&M and follow up with your inquiry or order. The proprietors Mr. & Mrs. Rohde are wonderful people and will do their utmost to give you satisfaction as to your purchase, large or small.

From Mr. & Mrs. Gordon Leavitt, proprietors of the Nutmeg Rock Shop, King St., Danbury, Conn., we are in receipt of the following:

"The Nutmeg Rock Shop specializes in fine quality slabbed material for cabochons that are distinctive. We also carry mountings and findings in sterling silver, rhodium and gold plate.

"We brought back several hundred

mineral specimens from our recent 8,200 mile trip through the northern tier of states and Oregon, New Mexico, Arizona and Joplin, Mo.

"We carry machines, equipment and supplies for the hobbiest or professional. We do custom tumbling and slabbing."

Note: The Leavitts are fine people, will give courteous attention to those visiting their shop and will give prompt attention to orders received.

From Russ and Alexander Filer of Filer's, P.O. Box 372, Redlands, Calif., we are in receipt of their latest Mineral Specimens catalog. A little data from the Filer's reads as follows:

"In this our 12th year of business, we are proud to present another catalog of our large and fine stock of minerals. Filer's deals exclusively with minerals, catering to the needs of Universities and advanced collectors who prefer the better quality material. Your orders will receive our prompt attention.

"We like to meet in person as many of our customers as possible. If you are going to be in this area, please drop in so that we can become acquainted. If you arrive after hours or on a "closed" day, phone PYramid 3-1300 for appointment. Filer's is especially interested in hearing from collectors in foreign countries who have specimens to offer."

Note: Minerals in this catalog are listed alphabetically for convenience to those looking for a certain specimen or specimens. Drop a line to the Filer's in reference to this catalog compiled for your needs as to fine better quality material.

The following note was received by us from the Thurstons, of Morningdale (Boylston), Mass., complimenting the pulling power of R&M in regards to his ads.

"You might be interested to know that your magazine pulls so many replies to our ad that we have for the past several months, ceased all other advertising. We

now have all we can handle in orders."

Note: We hope you continue to get fine response to your ads Mr. Thurston. This fact is attested to the faith our readers have in regard to your fine material.

We are in receipt of the latest collector's bulletin of Scott J. Williams, 2346 S. Scottsdale Road, Scottsdale, Arizona. Some minerals featured at reasonable prices are: malachite from Mina, Chihuahua, Mexico, tourmaline from Dimgannon Township, Ontario, Canada, native copper from Bisbee, Cochise Co., Ariz., stolzite from Broken Hill, New South Wales, Australia, barite from Kelly Mine, Magdalena, New Mexico."

Note: Send for bulletin No. 3, issue 10, for additional information on other minerals. Scott Williams will be most cooperative.

Irl Everett of the Everett Lapidary Shop, 2941 North 65th, Lincoln 5, Nebraska, advertising regularly in R&M sends in the following letter of interest not only to our readers but to present and future advertisers of our publication.

"I can never thank you and tell you what your magazine has done for me. I have run ads in it for sometime and I want to tell you that the results are more than gratifying. I feel that the money the ads cost me was very well invested. I must tell you that my Christmas ad was overwhelming, bringing me very good results.

"It pays to advertise in ROCKS AND MINERALS. I have had and still do have ads in other rock magazines, but yours is tops. I also must tell you of the many friends I have now from meeting them thru your publication. This summer I have had folks stop in from both east & west, north and south. It seems to me I have never met a bad rockhound. I have lots of dealings with people and the one thing that stands out the most is—be friendly, be fair in all your dealings, be the kind of dealer you want

the other guy to be. These 3 B's will make you a 'Busy Bee', I know because it did that to me."

Note: From the above letter of Mr. Everett and from others of similar content it has often proven more profitable to run a small ad continually for a year rather than insert 1 large ad but once in a year and expect overnight results as many do. Regular advertising pays for itself in the long run and it is good to keep this in mind.

Roy Plummer of Plummer's Minerals, 4720 Point Loma Ave., San Diego 7, Calif., would like this bit of information passed on to our readers. Plummer's regularly advertises in R&M.

"Many of our customers like to collect specimens that are small in size but of choice quality. Our 'miniatures' are especially selected for quality and will run in size from $\frac{1}{2} \times \frac{1}{2}$ " to 1×2 ". About

$1 \times 1\frac{1}{2}$ " would be the average. Nearly all specimens are good crystals either singles or groups. A very few of the rarer types may be massive chunks. Each specimen is mounted in an attractive manner on snow-foam and includes card showing name and location. Prices will run from 20¢ to \$1.00 each, a few higher."

Note: Inquire of Plummer's Minerals for a copy of choice "miniature" specimens list. He'll be glad to send you same for your selection of some nice buys noted therein.

TO OUR READERS—A few of the items in above column with this issue were intended for our Jan.-Feb. number but as they had arrived too late for insertion, we are pleased to make mention of them at this time.

—J. N. Bourne

If you cut gems — collect gems — deal in gems — are interested in gems — you can't afford to be without the . . .

Revised Lapidary Handbook - *Howard*

USERS SAY:

"It would be difficult to imagine a more complete or clearer guide."

"The most complete book I have seen on the subject."

"The best book of its kind on the market."

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225 pages — many photographs and line drawings

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